



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

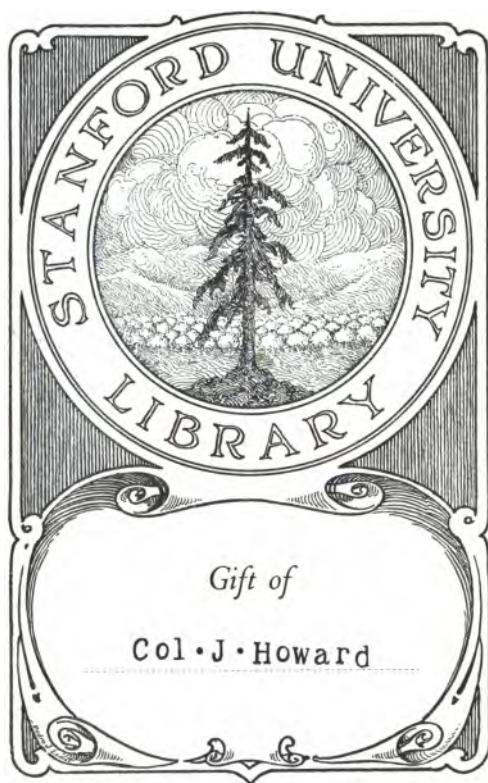
About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

Studies in Minor Tactics



Published by the University of the Pacific, Honolulu, 1911.
The Pacific School of the Pacific, Honolulu, 1911.
1911



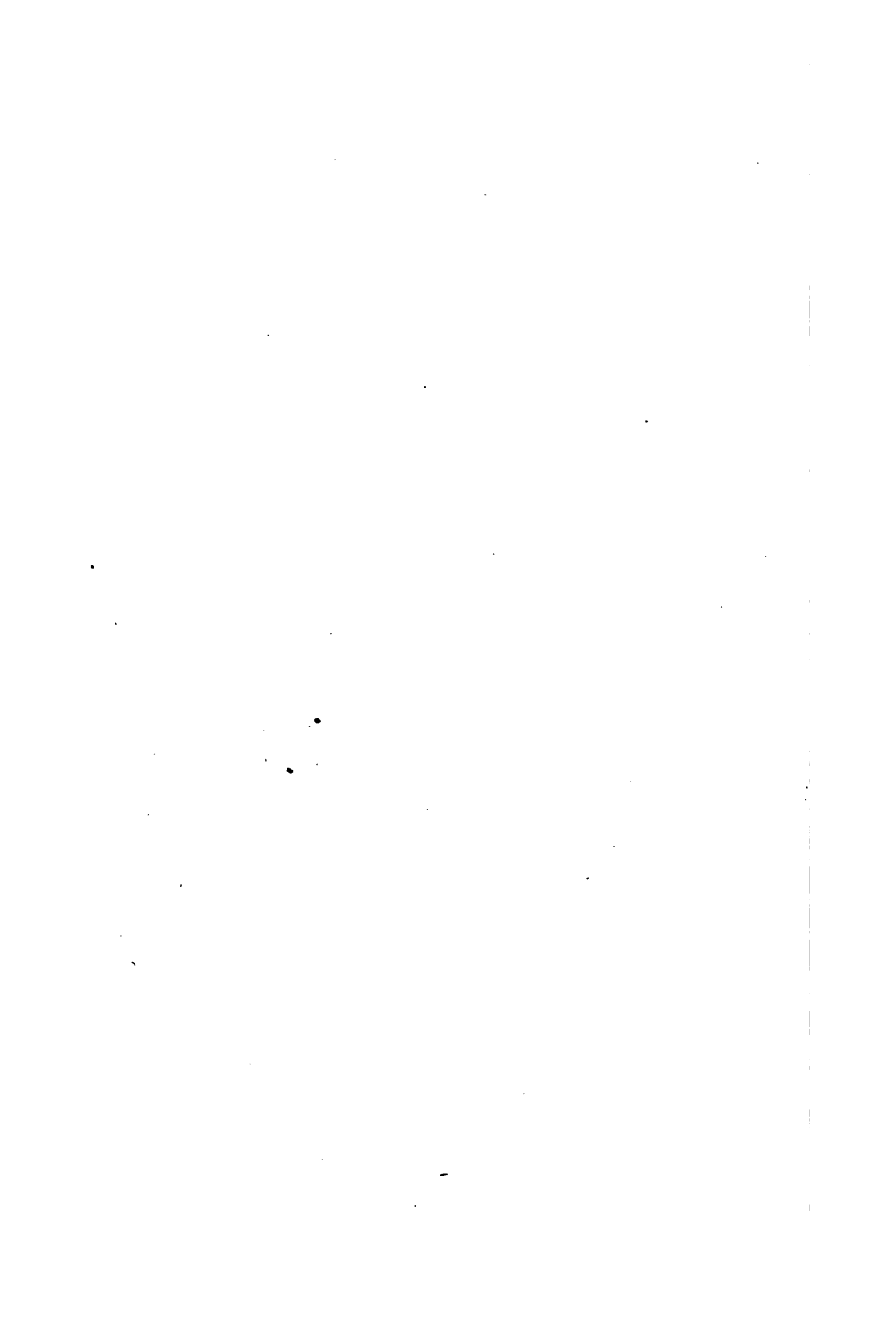
W28.2: TH

OmniSource Schools, T

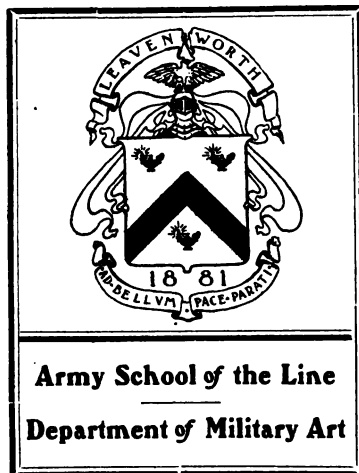
harrison, R.



54



STUDIES IN MINOR TACTICS



STATIONER LIBRARY

**Adopted by Direction of the Commandant for
Use in the Service Schools at Fort Leavenworth**

1908

308387

"Whatever arguments may be drawn [from] particular examples, superficially viewed, a thorough examination of the subject will evince that the art of war is both comprehensive and complicated; that it demands much previous study, and that the possession of it in its most approved and perfect state is always of great moment to the security of a nation."

WASHINGTON'S LAST ANNUAL MESSAGE.

Y8A281 0907M478

Staff College Press.

PREFACE.

These studies were prepared in the Department of Military Art to assist officers in the study of minor tactics and in the solution of problems involving only small forces.

In most of the studies an endeavor has been made not only to set forth certain principles of minor tactics, but also to enable the reader to form for himself a mental picture of the manner in which troops might well be handled in case the conditions assumed in the various studies actually existed in the field.

It is perhaps needless to say that the department does not consider any one of the solutions herein as the only correct solution to the problem presented in the particular "situation", but merely as a solution that is regarded as reasonable. The same is true of all "solutions" prepared by the department for the various problems included in the course in military art at these schools.

The following instructors have contributed to this collection of studies:

Major John F. Morrison, General Staff, Senior Instructor.
Captain Farrand Sayre, 8th Cavalry.
Captain John P. Ryan, 6th Cavalry.
Captain Matthew E. Hanna, 3d Cavalry.
Captain Campbell King, 1st Infantry.
Captain Ewing E. Booth, 7th Cavalry.
Captain Oliver L. Spaulding, jr., 5th Field Artillery.
Captain Duncan K. Major, jr., 27th Infantry.
1st Lieutenant Roger S. Fitch, 1st Cavalry, A. D. C.

The several lithographs were kindly prepared by Captain Edwin T. Cole, 6th Infantry, Senior Instructor, Department of Engineering.

All the work of revising, co-ordinating and editing the studies and of superintending their publication has been done by Captain Major and Lieutenant Fitch.

JOHN F. MORRISON,
*Major, General Staff,
Senior Instructor,
Department of Military Art.*

Army Service Schools
Fort Leavenworth, Kansas,
April 15, 1908.

CONTENTS

	PAGE
1. An Infantry Patrol.....	1
2. A Cavalry Patrol.....	16
3. Outpost—Infantry.....	29
4. Outpost—Infantry and Cavalry.....	47
5. An Advance Guard—Infantry.....	67
6. An Advance Guard—Infantry and Cavalry.....	91
7. A Rear Guard—Infantry.....	105
8. A Rear Guard—Infantry and Cavalry.....	125
9. Attack over Open Ground by Infantry.....	141
10. Forcing a Defile.....	153
11. Defense of a Position.....	161
12. Independent Cavalry.....	171
13. Cavalry against Cavalry.....	179
14. Cavalry against Infantry.....	191
15. March and Defense of a Convoy.....	203
16. Attack of a Convoy.....	221
17. Artillery with Small Commands.....	227

AN INFANTRY PATROL*

Situation:

A Blue force in the vicinity of Atchison is preparing to move south in a hostile country against a Red force operating from Kansas City.

A Blue detachment, sent forward to secure the Rock Island wagon bridge over the Missouri river, has reached Fort Leavenworth (ungarrisoned) on the morning of September 21st, 1907, and at 11 a. m. has established a line of outposts as follows: Missouri river—South Merritt hill—D—Sheridan's drive.

It is rumored that a Red detachment reached Lansing yesterday.

Lieutenant B is selected to command a small infantry patrol sent out from the outpost support at the National cemetery; at 11:15 a. m. he is given a road sketch of Hancock avenue by Captain A, the support commander, who instructs him as follows:

"It is rumored that a Red detachment reached Lansing, about seven miles south of Fort Leavenworth, yesterday.

"Friendly patrols will cover Cemetery ridge, which is the wooded ridge lying just west of us, Atchison hill over there to the southwest, Prison lane, which is the road just east of the cemetery and running south to the U. S. penitentiary, and Grant avenue, which is the road you see about one thousand yards east of Prison lane and running between Fort Leavenworth and the town of Leavenworth.

"You will select six men from this support and reconnoiter Hancock avenue as far as Atchison Cross.

*Map of Fort Leavenworth, Kansas, and Vicinity 4"=1 mile.

A description of the visible terrain east of Hancock avenue is particularly desired. Observation must be constant toward Metropolitan avenue, which is that road running east and west just beyond the penitentiary.

"Reports will be sent to the support at the National cemetery.

"Here are some message blanks. You have a field glass and compass. Compare your watch with mine."

Lieutenant B compares his watch with that of Captain A and at the same time assures himself that he has a pencil and a whistle. (F. S. R. ¶73.)

Owing to the extent and importance of the reconnaissance it is decided to send an officer to conduct the patrol, selected because of his special fitness for such work. (F. S. R. ¶¶72, 179.) The strength of the patrol is fixed at six men on account of the nature of the duty and the possible necessity of its having to send several messages. The orders and instructions given the patrol are identical in principle with those for larger bodies; they should contain what is known of the enemy and friendly troops in so far as it may affect the conduct of the patrol. (F. S. R. ¶74.) The object of the patrol should be clearly stated, and also the points of particular importance. The patrol should always be informed where to send reports. (F. S. R. ¶75.) Lieutenant B knows that patrolling requires greater skill and intelligence on the part of the individual soldier than most of his other duties, and he selects his six men from Company A, 1st Infantry, which forms the support, with due regard to their qualifications for this duty. He inspects their arms and ammunition, and satisfies himself that the men are in suitable condition for the duty. He sees that their accoutrements do not glisten in the sunlight nor rattle when they move. (F. S. R. ¶76.) In

the presence of Captain A, Lieutenant B repeats his orders and instructions to the patrol and his plan for carrying them out and assures himself that every man understands them. (F. S. R. ¶76.) He explains the signals by which they are to communicate and satisfies himself that they are thoroughly understood by all. He impresses upon them the necessity for concealment and caution in their movements and warns them about firing their pieces. (F. S. R. ¶¶77, 82, 180.) If there is no non-commissioned officer with the patrol, Lieutenant B designates a second in command.

The orders received by commanders of larger bodies of troops are not explained in such detail to the individual soldier, but in the case of small patrols it is important that each man be fully informed for the reason that the duty requires the exercise of individual knowledge and judgment; moreover in the event of the patrol leader being captured or killed, or of the patrol being scattered, each man should have a complete understanding of the situation so as to be able to act independently and intelligently under the circumstances.

The question of communication between the members of a patrol is an important one. If the patrol commander causes them to repeat the usual signals with the hand, rifle and whistle before starting, much subsequent delay and confusion may be avoided.

All preparations having been made, Lieutenant B locates himself on the road-sketch, marches his patrol in close order along Hancock avenue until he reaches the sentinel posted at the cross-roads, D. The sentinel having reported that he has observed nothing of importance, Lieutenant B informs him of the direction in which his patrol intends to advance. (F. S. R. ¶181.)

The patrol is then formed as follows: The commander and one man in the point on Hancock avenue—one to scout towards the enemy, the other to watch for signals from the other members of the patrol. One man follows about fifty yards in rear of the point with one man as a rear guard about the same distance in rear of him. Two men are on the right flank in the woods with intervals as great as will permit communication with each other and with the patrol leader. One man is on the left flank, moving along the edge of the woods so as to overlook the terrain to the east. (F. S. R. ¶78.)

It will be observed that this formation is similar to that of a large body of troops on the march, viz., an advance guard, main body, rear guard, and flankers, and is designed to protect the patrol from surprise, increase the sphere of observation and facilitate the escape of at least one member in an emergency. This is the general principle that governs the formation of patrols, hence their formations vary according to the topography and other conditions.

The two men moving through the woods on the right will considerably delay the progress of the patrol. But these woods flank the entire line of advance, offer concealment for hostile patrols, are too extensive to be covered by the friendly patrols on Cemetery ridge, and therefore cannot be neglected. The movements of the patrol will be well screened until the road forks at the railroad cut.

Before the patrol begins its advance the right flankers are ordered to reconnoiter the Sheridan's drive road to the top of the first hill, the left flankers to observe Prison lane from the edge of the woods. Lieutenant B joins the left flankers for a few moments and searches the open country to the south with his glasses. The flankers having completed their reconnaissance and signaled that they have seen nothing,

the advance is begun, the patrol moving cautiously, taking advantage of cover and regulating its march upon that of the leader, who in this case is also the commander. In small patrols this method is the most satisfactory.

When the target butts are reached the left flanker conceals himself behind them and at the same time utilizes them to increase considerably his range of vision. Just in rear of the target butts the point surprises and captures a Red trooper talking to a countryman. Lieutenant B halts the patrol, which remains concealed in observation, while he questions the prisoners after separating them so they cannot converse, or one hear the examination of the other. The trooper, whose insignia show him to belong to Troop A, 1st Red Cavalry, admits that he is a member of a patrol, but has lost his way. He refuses to talk further.

The countryman says that he comes from Salt Creek village about a mile west of this place, and is on his way to Platte City, Mo., to do some trading. He denies having seen any soldiers except this Red trooper who had just met him and was asking the way to Lansing when captured. He heard last night however in Salt Creek village that a Red force from the south was expected to pass through Leavenworth today. He professes ignorance of its size or composition. No further information can be obtained from him.

The patrol commander at once writes the following message:

Patrol, Company A, 1st Blue Infantry, Hancock Avenue, N. E. corner of Target Range, 21 Sept. 07, 11:35 A. M. No. 1.

To Commanding Officer,
Blue Support,
National Cemetery,
Hancock Avenue.

I send you trooper (Tr. A, 1st Red Cavalry) and countryman captured together. Trooper states he is member of a patrol and has lost his way; refuses to talk further. Countryman says he is from SALT CREEK village on his way to PLATTE CITY to trade and trooper had just met him and was asking road to LANSING when captured; that he has seen no soldiers, but it is reported in SALT CREEK that Red force from south expected to pass through LEAVENWORTH today; that he has heard nothing as to its size or composition. I will continue to move toward ATCHISON CROSS.

B,
Lieut.

The man in the point who had assisted in the capture is given the message and directed to take it and the prisoners—the trooper being dismounted and leading his horse—to the support commander at the National cemetery. He is ordered to move along Hancock avenue, cautioned to avoid exposing his party to view and impressed with the necessity of marching as rapidly as practicable. (F. S. R. ¶¶79, 87.) He will not attempt to rejoin the patrol.

The patrol commander observes that the target butts can be easily located and offer protection and concealment. He therefore instructs the patrol to assemble in rear of the target butts if the members become scattered or lose connection. (F. S. R. ¶80.)

The patrol then resumes its advance, the man

who was in the center being moved up to take the place of the man in the point who was sent back with the prisoners. When the point E is reached the patrol is halted. The right flankers are directed to reconnoiter the roads on the north bank of the railroad cut as well as the cut itself, cross at the further end, reconnoiter the south bank of the cut and join the patrol at the Hancock avenue entrance. As soon as the flankers have reached the top of the hill, Lieutenant B advances the patrol to the entrance of the cut where it is halted and remains in observation.

The patrol commander observes that from this point he can obtain an excellent view of the terrain to the east. While he is waiting for the reconnaissance of the railroad cut to be completed, he makes the following notes of the *visible* terrain in pursuance to his instructions:

“Entrance to railroad cut 250 yards south of target butts. The two railroads coming from the west through this cut turn south for about a mile, then one turns east and the other southeast. The country to the east is generally hilly, heights more or less uniform, much cut up by gullies and small water courses, open except for a fringe of bushes and trees along the water courses which for the most part run in an easterly direction. It is practicable off the roads for infantry and cavalry, offers fairly good defensive positions, though the field of fire is limited by dead spaces, and it is dominated by the high wooded ridge just west of, and parallel to, Hancock avenue. About a mile and a half to the southeast is the town of Leavenworth. South of the town and overlooking it is a high wooded ridge.

“About a mile to the southeast is a large penitentiary, surrounded by a very high and apparently thick brick wall, possibly 300 yards square. It is situated on a hill a little lower than this point and

should overlook the country in every direction for a considerable extent. A road runs north from the penitentiary towards Fort Leavenworth. A little more than a mile east of this point there appears to be a road running north and south between Leavenworth and Fort Leavenworth. Telegraph poles can be seen along this road. Cross roads connect Hancock avenue with the penitentiary road. Roads probably passable for all arms but heavy in wet weather."

The men sent to reconnoiter the railroad cut have returned and signaled that nothing had been seen. Lieutenant B moves the patrol along the edge of the woods west of the railroad tracks, as Hancock avenue is somewhat exposed. The left flanker is ordered to follow some fifty yards in rear of the point, as the country is open on the left and can be just as well observed from the line of march of the point. Two men are still kept in the woods on the right flank.

After a short march Lieutenant B observes two houses on the side of the road. He moves the patrol cautiously into the woods west of the houses and carefully reconnoiters from this shelter. Nothing suspicious develops. He takes one man with him to the first house and sends two men to the second house so as to examine them simultaneously—one man to enter the house and one to remain outside to give the alarm, if necessary. The rest of the patrol remains concealed. The houses are found to be deserted except for an old woman from whom no information is obtained. The patrol promptly moves on, keeping hidden in the woods so as to conceal its numbers and destination from the woman for fear that a hostile party may subsequently visit the house, and as the inhabitants are friendly to the enemy she would give it all the information she could.

On leaving the house it becomes necessary again

to put out a left flanker to reconnoiter the strip of woods to the left of the railroad, so that the formation of the patrol now resembles a skirmish line with wide intervals passing through the woods with one man some distance in the rear as a support or rear guard.

The passage under cover from the edge of the woods to Atchison Cross is rendered easy by each member of the patrol utilizing the railroad, the watercourse, the folds in the ground and the railroad cut.

At Atchison Cross Lieutenant B meets the commander of the patrol which has been moving along the ridge to the right. Having sent two men to reconnoiter the trail through the woods to the southwest, and having placed the remainder of the patrol in a concealed position advantageous for observation and from which retreat is easy, he inquires if the patrol commander has discovered anything of importance, and informs him of the capture of the trooper and countryman and of their conversation. He learns that the patrol consists of four men under Sergeant X and that their objective was Government hill. These facts he notes in order to report on his return. The patrol had discovered nothing, and, the reconnaissance being completed, was returning. Sergeant X then moves his patrol north along the base of Atchison hill and Lieutenant B continues to search with his field glass the country in the direction of Metropolitan avenue.

Just as he is about to leave, he observes two Red horsemen ride up on the hill just east of 62 and halt as if to reconnoiter the country towards Fort Leavenworth. Lieutenant B at once writes the following message:

Patrol, Co. A, 1st Blue Infantry, Atchison Cross,
21 Sept. 07, 12.10 P. M. No. 2.
To Commanding Officer,
Blue Support,
National Cemetery,
Hancock Avenue.

Two Red horsemen have just ridden up on hill about a mile south of ATCHISON CROSS and halted as if to reconnoiter. I will move to GOVERNMENT hill and remain in observation.

B,
Lieut.

He signals a member of the patrol to approach, shows him the two men, hands him the message and his notes on the visible terrain east of Hancock avenue, and directs him to carry them as rapidly as practicable to the support commander at the cemetery. This man will move by the same route over which the patrol advanced, exercising extreme caution to avoid being seen from the hill. He will not attempt to rejoin the patrol. Lieutenant B's action, in immediately sending a message, is premature, as it is not the first time the enemy has been seen. By delaying a few minutes much additional information of value sufficient to warrant another message may be obtained and the patrol depleted by one man instead of two.

Lieutenant B was ordered to reconnoiter Hancock avenue as far as Atchison Cross. If no enemy had been seen, his duty would have been accomplished and he should return. But on discovering the enemy, it is clearly his duty under the present circumstances to observe him, and endeavor to determine his position, strength and intentions. Lieutenant B therefore decides to continue the reconnaissance of the enemy. In the meantime the men sent to reconnoiter the trail through the woods to the

south-west have returned, and report no sign of the enemy.

The wooded hill just west of Atchison Cross, known as Government hill, promises a good view and cover. Leaving two men in observation at Atchison Cross, he moves with the other two men in the shelter of the woods some three hundred yards up the Atchison pike, then in skirmishing order with as wide intervals as permit communication and support, through the woods to the top of the hill. The vicinity is reconnoitered and the patrol is established under cover in a position suitable for observation, and facilitating retreat.

The patrol commander then proceeds to examine the country through his glass. He sees, about two and a half miles to the south, a column of infantry approaching and notices that the leading element will soon pass a house on a hill which will sharply define it. He decides to time the column as it passes this point and arrive at an estimate of its strength. A few men first pass, followed at a short distance by a small body in close order. About three minutes later the head of a column of fours reaches the house and marches by for one minute and ten seconds. Seven minutes later another column reaches the house and marches past for one minute and twenty-five seconds. Further to the rear are evidences of a still larger column; it will take several minutes for this column to reach the house. The information already obtained is too important to admit of any delay, and Lieutenant B decides to forward it at once. He estimates the situation as follows: The force observed consists of a series of detachments increasing in size progressively from head to rear. It is therefore clearly an advance guard. Assuming that infantry marching in column of fours on the road occupies one-half yard per man

and marches at a rate of three miles per hour or eighty-eight yards per minute, then about one hundred and seventy-five men will pass a given point in one minute. This allows for opening out.

The first column	men
$175 \times \frac{7}{4}$ - -	204
The second column	
$175 \times 1\frac{1}{4}$ - -	248
	<hr/> 452.

To this total must be added the point, advance party and flankers, of whom no record was kept—say in all fifty men. This would make the advance guard about five hundred men, or one battalion. It is probable that the advance guard consists of something like one-sixth of the entire force. Hence the whole force may be estimated at approximately three thousand men. The force must be very weak in cavalry or it would certainly have covered the advance. Whether or not artillery is present cannot be determined just yet. In a force of this size it would be with the main body and that is still too far away to determine.

Lieutenant B sends the following message to Captain A:

Patrol, Co. A, 1st Blue Infantry, Government hill,
21 Sept. 07, 12.35 P. M. No. 3.

To Commanding Officer,
Blue Support,
National Cemetery,
Hancock Avenue.

Infantry advance guard of one battalion is advancing along western edge of LEAVENWORTH. Its head now about one mile south of ATCHISON CROSS. Main body is following about a half-mile in rear, but I cannot yet determine strength or composition. I will remain here in observation.

B,
Lieut.

The directions to the bearer are substantially the same as in the preceding instance.

The head of the main body now reaches the house. Infantry in column of fours marches by for two minutes and fifty seconds. Then guns or wagons for three minutes. Then more infantry for eleven minutes and thirty seconds and this is followed at some distance by what appears to be a wagon train.

Lieutenant B. estimates the strength as follows:

$175 \times 2\frac{3}{4}$	- -	495 men
4×3	- -	12 guns and caissons
$175 \times 11\frac{1}{2}$	- -	2012 men;

say about twenty-five hundred infantry and one battery.

It is of course most important that this information be received at headquarters as soon as possible. The patrol commander embodies it in a message and sends a man to Captain A with all speed—the instructions being about the same as were given to the other bearers of messages. The messenger is directed to stop at Atchison Cross and send one of those men to join Lieutenant B. This reduces the patrol to two men besides the commander.

As the point of the advance guard reaches Metropolitan avenue the other member of the patrol informs Lieutenant B that five mounted men are approaching from the south by the trail along the top of the ridge. The patrol is at once concealed in the thick woods on the east side of the hill. The commander does not think it advisable to fire on these men. The noise will probably cause more harm than their defeat will repay. The hostile patrol, after reaching the top of the hill, rides off in the direction of Salt creek. The Blue patrol resumes its original position on the hill. It is now observed that the advance guard, whose leading elements have crossed Metropolitan avenue, is moving on Atchison Cross. It is evident that the position of the patrol is becom-

ing untenable. When the advance guard approaches, flanking parties will search the hills on both sides of Atchison pike; if then the patrol waits too long it may be cut off. On the other hand it is very important to know what the enemy will do on reaching Atchison Cross. Lieutenant B decides to send information as to the present direction of the enemy's march and then to gain the shelter of Corral creek so as to be able to watch the further movements of the enemy from a flank position and at the same time secure his own line of retreat.

He writes the following message:

Patrol Co. A, 1st Blue Infantry, Government hill,
21 Sept. 07, 12.57 P. M. No. 5.
To Commanding Officer,
Blue Support,
National Cemetery,
Hancock Avenue.

Red cavalry patrol of five men has just passed over GOVERNMENT hill going towards SALT CREEK village. Hostile advance guard is crossing METROPOLITAN avenue near railroad track and moving on ATCHISON CROSS. I will retire along CORRAL creek to a point opposite the penitentiary and remain in observation until enemy passes ATCHISON CROSS.

B,
Lieut.

Lieutenant B calls the man who is with him, shows him the position of the enemy, and directs him to convey the message to Captain A as rapidly as possible, following in general the route by which the patrol advanced, and exercising the greatest care to conceal himself from observation of the enemy. He will not attempt to rejoin the patrol.

Lieutenant B joins the man at Atchison Cross and they move rapidly under cover to the point

where the railroads cross Corral creek, thence in the bed of the creek, to Prison lane. Here he meets Lieutenant C, with a patrol of five men, sent out to reconnoiter Prison lane. He notes this fact for report on his return. They exchange information. By climbing a tree they can see Atchison Cross, but much of the country to the south is hidden by the penitentiary and the ridge upon which it stands. They observe that the Red advance guard has reached Atchison Cross and is moving over the hill towards Salt creek. As Lieutenant C is going to remain in observation, Lieutenant B decides that he has accomplished his mission and will return to the support with this latest information. In order to obtain cover, he moves east along Corral creek to the branch coming from the north, thence up this branch along Long ridge following the watercourse to the target range. From the end of this watercourse to the target butts is about 250 yards and the country is open. But the weeds are high and there are numerous small folds and hollows sufficient to conceal the movements of two men if they exercise proper care. In this manner they reach the target butts and move in the shelter of the woods along Hancock avenue to the sentry at D. The sentry is informed of the movement of the enemy across the ridge and the possibility of hostile patrols working out Hancock avenue. Lieutenant B then returns rapidly to the cemetery and reports to Captain A.

A CAVALRY PATROL*

Situation:

The Missouri river is the boundary between hostile states. A Red army east of the river and a Blue army west of the river are advancing on Leavenworth.

A Blue separate brigade with one squadron of cavalry has been pushed forward by rail to Winchester (19 miles west of Leavenworth) with orders to march on Leavenworth and seize the bridges over the Missouri at and near that point. The brigade was to camp at Winchester the night of September 20/21, covered by the cavalry which had been pushed forward toward Easton (11 miles west of Leavenworth). At 2 p. m., September 20, when the most advanced troop of the cavalry was approaching Easton, without having seen anything of the enemy, its commander gave Lieutenant A the following verbal order:

"The brigade commander has received information that the enemy is moving troops by rail to Beverley.

"Take a patrol of five men from your platoon, proceed by way of Rock Island bridge to the vicinity of Beverley, and obtain information of any hostile forces that may be concentrating at that point.

"I will send another patrol under Sergeant A with similar instructions via Terminal bridge.

*Map of Fort Leavenworth, Kansas, and Vicinity. 4"=1 mile.

"The squadron will camp on the line of the Big Stranger (11 miles west of Leavenworth) tonight, with headquarters at Easton. You will go prepared to remain out over night."¹

Lieutenant A selected five of the best men of his platoon and satisfied himself that they and their horses were in fit condition and that the latter were well shod and had no bad habits, such as neighing, which would render them unsuited for the work in hand. Rations, arms, ammunition, accouterments, and equipment were carefully inspected and defects corrected. No cooked rations were available or they would have been taken. The inspection completed, Lieutenant A acquainted the men with the orders he received from the troop commander, taking great pains to insure their fully understanding the situation and what was expected of the patrol. The general principles governing the conduct of infantry patrols are, as a rule, equally applicable to cavalry patrols, and to avoid a repetition of the preceding study only such principles will be mentioned here as are peculiar to the conduct of cavalry patrols.

During the march up to this point, Lieutenant A had been studying his map with the possibility of just such a mission as this in mind, and it took him but a moment to decide that his route at first would be along the Atchison pike via Frenchman. The Millwood road further to the north possibly might have been a less dangerous route, but the patrol would have been practically blindfolded the moment it entered the woods east of Salt creek. If the enemy's cavalry had crossed the Missouri river it was more likely to be encountered in force on the Atchison pike than on the Millwood road, but Lieutenant A took this chance in order to get a view to the east from the hills southeast of Frenchman. A patrol should

1 Fort Leavenworth is ungarrisoned.

remain concealed from the enemy, yet it must see what is going on about it, and, if to do this it becomes necessary to expose itself, this additional risk must be taken without hesitation. Lieutenant A pointed out on his map to his patrol the route he proposed to take as far as the hills west of Leavenworth; he gave this information to Sergeant A, also, and learned from him that he would enter Leavenworth via the Zimmerman road.

The patrol then took up the march. Lieutenant A and one man were in the lead, two men were about 100 yards to the rear and the remaining two men were 100 yards still farther to the rear. All followed the road, taking advantage of such cover as was afforded by ditches, hedges, etc. A patrol must advance quickly. The peculiar value of a cavalry patrol lies in its great mobility. To cross country, following woods, ravines, and other cover, would wholly sacrifice this mobility for increased security, the horses would become a mere burden and the patrol would be less mobile and efficient than one composed of infantry. In this particular case mobility was of special importance. Beverley, Lieutenant A's objective, was 15 miles away, and the afternoon was already partly gone. As he drew nearer to Beverley his march would have to be conducted with greater caution; consequently Lieutenant A appreciated the necessity for making as much speed as possible in the early part of the journey, without taking undue chances; he did not lose sight of the fact that he might meet hostile forces at any time, especially cavalry. The enemy apparently was pursuing precisely the same tactics, in his effort to secure possession of the Missouri river bridges, as was the Blue separate brigade, and, if he were detraining troops at Beverley, he would undoubtedly push his cavalry forward at the earliest possible moment.

For the first few miles the patrol was in comparative safety, since the road it followed had already been passed over by the most advanced scouts of the squadron, and Lieutenant A, without neglecting to observe, trotted out, walking on the hills only, until he came up with a patrol from his platoon about four miles east of Easton. From this point he proceeded with greater caution and more slowly, occasionally stopping on commanding points to reconnoiter the country to the front, orient his map and point out the location of the patrol to his men. Little time was lost in this part of the journey in reconnoitering side roads, since it was the duty of other patrols to warn the squadron of the near approach of hostile patrols and Lieutenant A's chief concern was to reach the vicinity of Beverley without being discovered by the enemy.

By 3:45 p. m. the patrol was about one mile west of Frenchman. Here it met a farmer returning home from Leavenworth, who told Lieutenant A that when he left Leavenworth at a little before 2 p. m., it was rumored that Red troops were being detrained at Beverley and that some of their cavalry had been seen along the east bank of the Missouri river about noon. Lieutenant A did not delay to question him further, but hastened on in an effort to gain the hills in his front before they could be reached by the enemy's patrols, which he now felt sure would soon be across the river if they were not already. At Frenchman he delayed long enough to water the horses—the road from the north and that from the east being observed, in the meantime, by mounted sentinels; he also inquired if the country to the east was visible from the top of Sentinel hill, and was told that it was not, this information verifying the accuracy of his map. Before leaving here the men were told to observe this point well as it would be

the place of assembly in case the patrol were scattered.

With his patrol still in the same formation as at the start, he covered the dangerous stretch of road south-east of Frenchman at a swift trot, without delaying to question the inhabitants; he pulled down to a walk at the forks of the road at the Moore house and took the right hand fork as being the easiest and quickest way to the top of the hill. He proceeded along the road to the cut on the top of the hill and then turned sharply off to the left and followed along the ridge, under cover, to a point on Atchison hill from which the low ground to the east was open to his view. It was then 4:15 p. m. Lieutenant A sent four mounted men with instructions so to post themselves, two on either flank of the patrol at a distance of about 200 yards, as to prevent the patrol from being surprised. Lieutenant A then carefully examined the country in his front through his field glass for the purpose of determining whether the enemy had yet crossed the Missouri river and what the subsequent movements of the patrol should be.

He remained here for some minutes without seeing any signs of the enemy and had about decided to move down the hill and strike Hancock avenue when five mounted men, evidently a hostile patrol, appeared on the road along the north side of the U. S. penitentiary, and moved at a trot towards Atchison Cross. Lieutenant A immediately decided that he must move, and remained but a moment longer to make sure that the Red patrol was not closely followed by other hostile forces; he then assembled the patrol, gave it all the information he had obtained up to that time, explained his present intentions, and moved it through the woods towards the Schmidt house. As the patrol was about to emerge from the

woods, four Red troopers were seen on the road just north of the railroads coming down the hill towards the McGuire house. Lieutenant A immediately dismounted one man and left him to observe the movements of this second patrol while he conducted the remainder of the patrol and the led horse to a place of concealment in the little water course on the north slope of Atchison hill where all dismounted. One man was then sent towards the cuts at E to overlook the country to the east, one was sent to the southern edge of the little woods, two were left with the horses, and Lieutenant A joined the man left to watch the hostile patrol. He found that it had halted at the Schmidt house, but presently it moved on along the road to the west. Moving along the side of the hill under cover, Lieutenant A was able to keep the patrol in sight, and was much relieved to see it joined at G by five Red cavalymen from the direction of Atchison Cross, evidently the first patrol seen. The two patrols remained here for some minutes, apparently conferring with each other, and then all nine men continued their march west along Atchison pike and were soon out of sight beyond Sentinel hill. This was at 4:50 p. m.

Leaving the man in observation, Lieutenant A hastened back to his horses, called in his two sentinels and learned from them that they had seen no further indications of the enemy. Once more the patrol was mounted and started through the woods towards the Schmidt house (which was found to be unoccupied), picking up the sentinel on the way. It regained the road, turned east and trotted up the hill beyond the McGuire house until Lieutenant A reached the trail leading north along the ridge to Sheridan's drive. Here Lieutenant A signaled the patrol to halt, dismounted and deliberately searched the country in his front without seeing any signs of the enemy. He then

mounted, drew back into the woods and signaled the patrol to assemble. The rear men having come up he pointed out the principal features of the country and stated that their further march would be along Hancock and Pope avenues to the river bridge and the timber beyond. The march was then resumed at a walk.

As the patrol passed the target butts, one of the central men was directed to skirt the woods south to Hancock avenue. Sheridan's drive was passed without halting. Just as Lieutenant A reached the western corner of the National cemetery the right flanker signaled the enemy in sight, and Lieutenant A, halting the patrol, hastened to his side. Two hostile troopers were seen on Engineer hill, and three on Merritt hill moving west along the road across the cavalry drill ground. Lieutenant A believed these to be the advanced scouts of a larger force, probably then crossing the river bridge, and it took him but a moment to decide that his patrol must be moved to a point where it would be more secure from discovery, yet from which it could observe the country about Fort Leavenworth. Sending the flanker back to his former place in the center, he turned the patrol into the woods and started up the hill north of the road. As the patrol entered the woods the distances were reduced to about 50 yards. After a few moments a faint trail was found on top of the ridge; this was followed for about 300 yards to the north-east until the top of the hill was reached, from which the surrounding country was plainly visible. The patrol was then dismounted under cover and two men with the led horses were hidden deep in the woods; two men were sent to post themselves as sentinels about 200 yards away on the trail, one in each direction, while Lieutenant A and one man searched the country below.

The hostile patrols had disappeared from sight, but four Red troopers were seen moving west along Pope avenue followed at about 200 yards by about 20 more; a third detachment, carrying a guidon, followed about 500 yards further to the rear, and, as it came nearer, it was seen to be the larger part of a troop. The head of the column soon disappeared under the hill, but appeared a few moments later on the north slope of Engineer hill, where the entire troop was soon assembled. About the same time the head of a column of cavalry appeared on Pope avenue and a few minutes later it turned off the road onto West End parade, formed column of troops, halted and dismounted. There were three troops in this column and apparently they were going into camp for the night. It was evident that there was at least a squadron of cavalry west of the river. In the meantime the troop on Engineer hill had sent small detachments to Merritt hill and toward Long ridge, as though it were putting out outposts; the remainder of the troop had dismounted.

From what he had seen Lieutenant A believed that the enemy had sent a squadron of cavalry to seize the bridge at Fort Leavenworth and hold the ground west of it, and that it had gone into camp and put one troop on outposts for the night. He could scarcely hope to get across the bridge under the circumstances, for the enemy would certainly have it closely watched by a detached post. What then was he to do? He thought of making a wide detour and attempting to cross at the Terminal bridge, but he knew that Sergeant A was on that road so he rejected that idea. He had secured valuable information of the enemy, but he had not yet completed his mission. To carry out his original order appeared impracticable, but he believed that by remaining in the vicinity over night and continu-

ing his reconnaissance in the morning, he might discover what forces were in the rear of the squadron. This he decided to do. His position at that moment was exceedingly dangerous, yet to move was still more so. If the enemy's patrols were moving on the trails through the woods the best way to avoid them was to remain concealed in one place. It was now a few minutes after six o'clock; by 7 p. m. it would be dark and the enemy's patrols would then probably confine themselves to the main roads; besides he wished to continue his observations from his present good position as long as there was sufficient light. So he remained where he was until dark, but without seeing anything new, and then assembled his patrol.

While daylight lasted he wrote a message giving the result of his reconnaissance up to that time, and shortly after dark two men were each given a copy and sent together to carry it to Easton. They were instructed to go by the road over which they came, Lieutenant A fearing that they might lose their way in the darkness if sent by a new route. The remainder of the patrol was then moved down the hill, and after the horses had been watered in Quarry creek they were concealed in a small water course south of the creek. One man was placed on duty as sentinel, and one to hold the horses. In this way two reliefs were formed, Lieutenant A taking his turn with the others. There was no talking nor smoking, nor were the cinchas loosened nor the bridles removed, but the horses were allowed to browse and green branches were cut for them. The horse-holder was instructed to watch the horses for indication of danger; the patrol was told to scatter in case of attack and to assemble at daybreak the following morning at Kickapoo, the location of which was explained.

The night passed without alarm. During the night Lieutenant A had deliberated on a course of

action for the next day. He believed that the enemy's cavalry would resume its march the following morning and that it would be closely followed by such other hostile troops as were east of the river. He thought of moving through the woods to a point north of the river bridge from which it could be seen, and of observing the crossing of the enemy from that position. But this would have been more hazardous than leaving the patrol in its hiding place while reconnoitering from the top of the hill. Troops from the other side of the river would come into view soon after crossing the bridge. The woods were very thick and there was a dense undergrowth that made them difficult to get through, and it was not possible to see the horses fifty yards away. The trail leading to the hiding place was so faint as to be scarcely discernable, and, as it evidently had not been used for some months, it was not probable that the point where it entered the woods would be noticed. So at day-break, Lieutenant A, leaving two men with the horses, took one man and ascended the hill to his observation point of the evening before; this man he posted to watch the trail towards the west while he watched the approach from the east as best he could, at the same time observing what was going on below him.

The cavalry was early astir and was in column of march towards the west by sunrise. Soon the cavalry had disappeared and for an hour nothing was seen except one or two mounted patrols; but about 6:30 a. m. infantry was seen approaching on Pope avenue in advance guard formation. The column moved west along the road until it disappeared under the hill. For an hour the successive parts of the advance guard and main body continued to march by in plain view of Lieutenant A. He had carefully timed the passing of the different portions of the column and a moment's calculation showed its strength

to be three regiments of infantry and two batteries of field artillery. For a half hour longer, or until 8 a. m., Lieutenant A waited, thinking that other troops might follow, but nothing appeared.

Lieutenant A had now finished the first part of his mission. He had complete information of the enemy's strength, but the task yet before him promised to be the most dangerous of all—to deliver this information to his commanding officer. Without delay he assembled the patrol, mounted it, carefully explained to the three men all the information in his possession, and instructed them, in case the patrol were scattered, to make every effort to reach their command. Stopping a moment to water the horses, the patrol, in single file, with about 50 yards distance between files, then took a northerly direction through the woods, picking its way as best it could and following the contour of the hills. Lieutenant A was in the lead and made all speed possible under the circumstances, stopping occasionally to listen, or when about to cross a trail through the woods. After about two miles of this hard marching, the patrol, at 9:05 a. m., reached a well defined road running east and west through the woods. Lieutenant A turned west on this road (which he believed to be the 5-9-11 road marked on his map), signaled the leading man to join him and the others to increase their distances, and took the trot.

In a few minutes he came to the edge of the woods and saw Salt creek valley, and the Millwood road leading straight to the west before him. He delayed here a moment to search the country but saw nothing. Soon after leaving the wood the patrol was fired on from Hancock hill but it reached the ravine at the Schroeder house without casualty and followed the ravine under cover of the hill to Salt creek bridge which it crossed in safety and again

took up the trot. When approaching the cross-road at Taylor school house, distant firing was heard to the southwest.¹ About a mile further on he met a patrol of five men from his squadron. The non-commissioned officer in charge told him of the whereabouts of the squadron and gave him a man to guide him to it, and at 10:30 a. m. Lieutenant A reported the result of his reconnaissance to his squadron commander.

¹ It was learned later that this was the termination of a cavalry combat in which the hostile cavalry was driven back, the successful termination of the combat being due largely to the definite information the Blue cavalry commander had received of the Red cavalry from the two messengers sent in by Lieutenant A the night of September 20-21.

OUTPOST*--INFANTRY

Situation:

A Blue division, operating in hostile territory, has advanced from Omaha, Neb., to Atchison, Kas. A Red division is reported at Topeka, Kas. On October 1, a Blue detachment is sent south from Atchison to repair and guard the Missouri Pacific R. R. The most advanced element of the detachment is the 1st Battalion, 1st Infantry, under command of Major X, and with eight mounted orderlies attached. This battalion has reached Fort Leavenworth. The remainder of the detachment has halted at Kickapoo and other points along the railroad north of Kickapoo.

At 3 p. m., when the 1st Battalion reaches One Mile creek on Grant avenue, its advance guard, which has reached Pope hill, is fired on from the hills south of Corral creek; at the same time three Red cavalrymen are seen moving south at a trot near the U. S. Penitentiary. A message dated 1 p. m. has just been received from a troop of Blue cavalry at Lowmont stating that Leavenworth and the roads to the west as far as Big Stranger creek were clear of the enemy. The railroad between Kickapoo and Fort Leavenworth has been found intact. What does Major X decide to do? What orders does he give?

Major X can form no definite estimate of the strength and composition of the enemy. The Reds who have fired on his advance guard may be only armed civilians, tho Red troops may have entered

*Map of Fort Leavenworth, Kansas, and Vicinity, 4 in.—1 mile.

Leavenworth on roads from the south—which do not appear to have been reconnoitered. The Red cavalrymen seen may have been sent to disable the railroad between Leavenworth and Kickapoo; if so, they are retiring without having accomplished their object. However, it is probable that they have observed the Blue battalion and other Red cavalrymen may be watching it from the ridge to the west. Since the enemy has cavalry and Major X has none, it is probable that the Reds have full information of the strength and movements of the Blue battalion. The only strong hostile force reported to be in this theater of operations is distant several marches (viz., at Topeka), but the fact that the country is hostile to the Blues renders it probable that their information is not complete nor entirely reliable. If, however, the Reds are preparing to oppose the Blue division, they are more likely to concentrate than to disperse their forces. Major X is of the opinion that he is opposed by only a reconnoitering detachment of Red cavalry, possibly assisted by “home guards” from Leavenworth.

Major X has found no work for his battalion in repairing the railroad, but the hour is late, he has made a long march (nineteen miles) and his men are in need of rest. He is about five miles from supporting troops, is opposed by an enemy of unknown strength and has in his front a large city with a hostile population. His mission does not require aggressive action. By halting where he is, he may be able to protect the railroad between Kickapoo and Fort Leavenworth, while by advancing farther he would give the Reds a better opportunity to disable it in his rear.

He decides to halt for the night. He must now decide the following questions:

Where will the camp be located?

What line will be defended, and what is to be done in case of attack?

What will be the strength of the outpost and its general position?

What orders will be given the baggage train?¹

The north slope of Devin ridge is sheltered from the view of the enemy by trees and intervening high ground; it is a well drained, sanitary site for a camp and is sufficient in extent for a battalion (110 by 250 yards); there are good roads leading to it and it has wood and water close at hand. (F.S.R., ¶606.) It will, however, be necessary to boil thoroly all water used for drinking purposes—for both One Mile creek and Merritt lake receive drainage from the National cemetery.

Devin ridge has not a clear field of fire to the south and, hence, is not so good a defensive position as could be wished, but its flanks are covered by Merritt lake and the Missouri river and, if need be, can be defended stubbornly. Judging from the map, the line Merritt hill—Pope hill—Rabbit point appears to possess advantages, both as a defensive position and as an outpost line. It has a good view and clear field of fire to the front and flanks, its right flank rests on open ground and its left on the river, it can be approached under cover from the rear, has good communications laterally and to the rear and affords

¹ When practicable, a commander's decisions of these questions, together with recent information of the enemy and supporting troops, should be communicated in the form of an order to subordinate officers before the end of the march. (F.S.R., ¶144.) In order that it may be issued in good time, it must generally be based on a map. In the case before us Major X does not decide to camp until he has completed the march, and he should make his decisions quickly, in order that the men may be given rest as soon as possible. For the purposes of this study Major X and Capt. A (the outpost commander) are supposed to have copies of the 4 inch scale Fort Leavenworth map; in practice maps containing so much detail will rarely be available.

concealment from the view of the enemy and shelter from his fire. (S. & I., p. 46.) No good continuous outpost line can be found nearer to Devin ridge because the wood extends from Devin ridge to this line. (F.S.R., ¶141 and S. & I., p. 46.)

Altho well adapted to the purposes of an outpost, this line is too long to be effectively defended by a single battalion; however, it is not likely to be attacked at all points at the same time and the battalion could be moved quickly from Devin ridge to confront an enemy either on the line Pope hill—Rabbit point, the line Merritt hill—Pope hill, or north of Merritt lake.

Major X decides to camp on Devin ridge with an outpost on the line Merritt hill—Pope hill—Rabbit point and to reinforce from the main body any part of the outpost seriously attacked.

Since this line is to be held by the outpost until reinforcements can be brought up from the main body, a distance of 600 yards, the outpost must be made large enough to have a considerable power of resistance at the outset.

Major X decides to relieve the advance guard (assumed to be Company D) and to detail Company A as outpost. The advance guard is usually kept on duty and required to furnish the outpost, but since the 1st Battalion, 1st Infantry, is the most advanced element of the Blue detachment it is likely that the duty of its advance guard has been severe during the day and, if so, it should be relieved.¹ While a company may be a larger force than is needed for outpost duty in this case, its detail will obviate the splitting of a unit,

¹ In the case of small bodies of troops the advance guard can usually be relieved without inconvenience, but in large bodies it is not often practicable to do so, and the same advance guard may be retained for considerable periods. Large advance guards obtain rest by a rotation of duty, units which have been employed on the line of observation being assigned to the supports or reserve the following day. (Par. 127 F.S.R.)

a feature always to be avoided—especially with the company, parts of which should never be detached for considerable periods. It will not be necessary to keep the entire company on the alert, but it can furnish such covering detachments as are necessary to provide for the security of the camp. By detailing a company, Major X ensures these detachments being relieved at proper intervals, and places the details of their arrangement under the supervision of an experienced officer.

Sentinels or cossacks posts might be sent directly from the camp, the reserve and supports being omitted as features of the outpost (F. S. R. ¶142); this is often done by small bodies when it is intended that the outpost shall fall back on the main body in case of attack.

Small bodies of troops isolated from supporting troops and apprehensive of being attacked should, as a rule, entrench the line they expect to defend and rest on their arms in this position. In such cases the only outpost required consists of a few sentinels, posted for the purpose of giving warning of the approach of an enemy.¹ The use of covering detachments would weaken the main body by dispersing it and the detachments might mask the fire from the position.

Major X does not believe that the enemy possesses any considerable force in this vicinity and, even

¹ The instructions given by General George Washington to the commander of a detachment sent to make a reconnaissance in the vicinity of the British army apply to such cases: "I do not mean, or wish, that you should encamp very near the Enemy of nights, but whenever you do Incamp, that you do it in proper order of battle, so that your officers and men may rise at once upon the ground they are to defend." (Letter dated White Plains, July 31, 1778.)

With reference to a disaster occurring in the South African war thru neglect of this precaution, Major Baden-Powell says: "Had the men been lying round the edge of the camp, ready to shoot outwards, it is doubtful if the Boers could have got inside." (p. 231, War in Practice) See Par. 562, I. D. R.

if he thought otherwise, does not yet know upon what line it will be best to meet him; his attitude resembles a position in readiness, rather than a defensive position.

The outpost will guard the front and flanks of the battalion but the roads in rear must also be watched. This precaution is usually unnecessary in the case of large bodies, but small ones are in greater danger of attack from the rear because the distance which the enemy has to traverse in order to turn them is less, and because the turning force may be small and consequently possess greater mobility. The danger is the greater in the present case because the enemy has cavalry while Major X has none. It would extend the outpost line too much for proper supervision by the outpost commander to require the outpost to draw its flanks back north of One Mile creek, consequently Major X decides to send detachments directly from the main body to guard the roads in his rear.

He cannot yet decide when the outpost is to be relieved. It would be desirable to make this decision now, if practicable, but—in view of the meagerness of his information in regard to the enemy and the fact that his own orders for the following day have not yet been received—it would be looking too far ahead to decide this point now.

Some risk would be incurred in bringing the wagons up to camp, for if the battalion were driven back across One Mile creek, the wagons could retire only by Grant avenue, which is a defile here. It would, no doubt, be safer to hold the wagons north of One Mile creek, at least until more definite information in regard to the enemy has been received; but consideration for the comfort of the men induces Major X to order them brought up to camp. It does not appear practicable, however, to send the wagon of the outpost company up to the outpost line,

for if it is moved on Grant avenue, it will be exposed to the view and fire of the enemy, and it can be taken forward under cover only by moving it over difficult ground from which it could not be quickly extricated.

Major X must issue his orders promptly, for the hour is late, and the men are tired. They should be permitted to remove their packs and make themselves comfortable as soon as possible. There is still work to be done in making camp and cooking dinner.

Major X halts the battalion, gives the command, "Fall out, Rest", assembles the battalion staff and company commanders (except the captain of Co. D) and gives the following verbal order:

"Our advance guard has been fired on from the hills south of Corral creek. Three Red cavalymen have been seen near the U. S. Penitentiary. A troop of our cavalry is at Lowmont and reports Leavenworth, and roads to the west as far as Big Stranger creek, clear of the enemy before 1 p.m. today.

"We will camp here.

"Company A, with six mounted orderlies, will form the outpost; relieving the advance guard, and holding the line Merritt hill-Pope hill-Rabbit point. Hancock avenue will be patrolled.

"The battalion will camp on the north slope of Devin ridge in column of companies facing east, officers' tents on the left flank.

"Company B will furnish the interior guard, and will place a sentry squad at the southern exit of Fort Leavenworth and another at the bridge over the Missouri river at Fort Leavenworth.

"In case of attack the outpost will be supported.

"The baggage train will come up to the camp.

"Messages will reach me at camp."

The order is transmitted verbally to the commanding officer of Company D by the adjutant. It

is not written unless it is desired to make a record of it. Subordinate officers, however, should take notes of portions of the order relating especially to them. Major X points out the places which he names (Devin ridge, etc.) and indicates on the map to the commanding officer of Co. A the desired location of the outpost. Any officer who does not understand the order should ask to have repeated the part which he does not understand. An opportunity should be given for asking questions, and the necessary explanations should be given patiently.

Additional Situation, (Blue Outpost):

What arrangements are made by the outpost commander, Captain A, and what are his reasons for them?

Outpost problems admit of a greater variety of solutions than any other class of problems presented to military students. There should be no fixed schemes for solving them.

Sometimes the security of a force is provided for merely by sentinels or groups whose only duty is to give information of the approach of an enemy early enough to enable it to prepare for its own defense. Cavalry cossack posts, observers in balloons, or sentinels in especially good posts of observation and provided with field glasses or telescopes, are well suited to this duty.

A system of reconnaissance, whether by patrols or spies, which finds the enemy and gives early and reliable information of his movements furnishes the greatest security possible.

Security may also be provided for by covering detachments blocking every avenue of approach with sufficient force to delay an enemy long enough to enable reinforcements to reach the point attacked or a

position in rear that is to be held as the line of defense.

The security of a body of troops is more often provided for by a combination of these methods than by the exclusive use of any one of them.. The method to be employed in any case will depend on a variety of circumstances and will, in general, be decided upon by the commanding officer. The most important elements of an outpost—its composition, strength and duties, its general position and its conduct in case of attack—are usually prescribed by the order for the daily halt, and outpost problems cannot be studied without reference to these orders.

At the time Major X's order is issued, the advance guard is providing for the security of the battalion. When the main body halts it is the duty of the advance guard to convert itself immediately into a temporary outpost, and for this purpose it will occupy the best nearby posts of observation and cover with detachments the routes by which an enemy could approach. (F.S.R. ¶107 & 146, and p. 28, S. & I.)

It has been assumed that the advance guard is Company D; it will be assumed further that the support (3 sections) is now (3.05 p. m.) on Grant avenue opposite the highest part of Merritt hill; and that it has two squads on Pope hill observing the enemy, another squad on the west knoll of Merritt hill and another on the railroad track east of Pope hill.

Captain A, after hearing the order of the battalion commander and copying in his notebook the substance of the portion relating to the outpost, marches his company forward to the support and confers with the commander of the advance guard. He ascertains the location of the different parts of the advance guard and notes that they are practically on the line which he has been ordered to hold.

He accepts, for the present, these dispositions as being substantially correct and decides to send a detachment to relieve each part of the advance guard in its present location; by this course the advance guard can be relieved at once and the detachments of the outpost can be moved later if a necessity for any change is found to exist.

He knows that the outpost line is to be held as the defensive position of the battalion in case it is attacked, and in order that this line may be held strongly from the outset decides to place his entire company on it.

He gives the following order verbally to his company:

"Our advance guard has been fired on from the hills about a mile south of us, and a few Red cavalrymen have been seen near the U. S. Penitentiary. A troop of our cavalry is at Lowmont and reports that Leavenworth (the city to the south of us) and the roads to the west of it were clear of the enemy this morning. Our battalion will camp on this ridge east of this road.

"This Company is detailed as outpost and will relieve Company D, and hold the line Merritt hill—Pope hill--Rabbit point.

"Lieutenant C with the 3d section and four mounted orderlies will form Picket No. 1, relieve the squad of Company D on Merritt hill and patrol Hancock avenue.

"The 1st Platoon with two mounted orderlies will form Picket No. 2, move to Pope hill and relieve the part of Company D that is now there.

"The 4th Section will form Picket No. 3 and will relieve the squad of Company D east of Pope hill.

"If we are attacked we will hold our ground; we will be supported by the battalion.

"Our wagon will stop at camp and dinner will be cooked there immediately.

"Messages will be sent to Picket No. 2."

Captain A points out the localities named, especially the places where the various parts of the advance guard are to be found.

As the adjutant is present, having ridden up to communicate Major X's order to the commander of the advance guard, Captain A reports verbally to him the dispositions which he has ordered.

The pickets start out immediately; they are not preceded by patrols, since the ground they have to go over has already been reconnoitered.

Captain A mounts the horse of one of the orderlies assigned to picket No. 2 and, taking the other orderly with him, rides rapidly to Pope hill, keeping under cover of the trees east of Grant avenue. From Pope hill he studies the country in view, comparing it with his map. (F.S.R., ¶153.)

The ground slopes to the south as uniformly as a glacis for about 500 yards to Corral creek, which flows east across the front of the position. Beyond Corral creek the right bank rises more abruptly than the left. About a half mile to the south of Corral creek is a ridge which runs east and west along the northern outskirts of the city of Leavenworth and which appears to possess considerable defensive strength. The valley of Corral creek extends in front of the entire position of the Blue outpost, and this area is open, with no considerable obstacles, except the bed of the creek and the ravines formed by its branches. These ravines do not appear to Captain A to be serious obstacles for either infantry or cavalry and are important chiefly on account of the cover which they afford. For this reason they are a source of weakness rather than of strength to the outpost line.

Since the ground in front of the line may be traversed by an enemy anywhere, it must be watched everywhere, and it will not be sufficient merely to watch the roads, as would otherwise be the case. Detachments possessing sufficient strength to check or delay an enemy must be kept on Merritt hill and Rabbit point as well as on Pope hill. The central detachment at Pope hill, being stronger than either of the others, is, however, an advantage, as it can quickly reinforce either flank of the outpost in case of an attack. If the center is attacked it may be able to check an enemy without reinforcement.

It is apparent that nothing would be gained by posting sentinels in front of the outpost line (for instance, along Corral creek) for they would not see as much there as could be seen from the outpost line.

Captain A directs Picket No. 2 to take post in the depression just north of Pope hill and east of Grant avenue; here it is on the main road leading from the outpost position in the direction of the enemy; is under cover near a good defensive position on the outpost line; and is able to communicate under cover with all parts of the outpost line. (F.S.R., ¶159, and S. & I., p. 63.)

The picket commander places a double sentinel post on Pope hill which is to be relieved directly from the picket. These sentinels are concealed behind trees, selected as being good posts for observation; the men are allowed to sit down, as they have a good view to the front in this position; they are near enough to each other to be able to communicate easily in an ordinary voice. (F.S.R., ¶166.)

Another man, provided with field glasses, is directed to climb one of the tallest trees on Pope hill. He finds so favorable a post for observation here that the double sentinel post is taken off, especially as the enemy shows no further activity.

The picket stacks arms and the men are allowed to remove their equipments, with the exception of their cartridge belts. (F.S.R., ¶162.)

A sentinel is posted to guard the stacks and communicate with the sentinel in the tree. (F.S.R., ¶158.)

Small patrols (two men each) are sent to communicate with the adjoining pickets and find the best route to them. No patrol is sent to the front to reconnoiter from Picket No. 2, because it could not go from Pope hill to the south or west without being exposed to view from the high ground south of Corral creek. Captain A then directs the commander of Picket No. 2 (1st Lieut. B) to entrench the defensive position of the picket and informs him that he (Capt. A) is going to visit Picket No. 1. (F.S.R., ¶147.)

As he approaches this picket the commander reports to him. (F.S.R., ¶163.) He finds the picket on the north slope of Merritt hill; it has placed a sentry squad on the western knoll of the hill and has a single sentinel at the picket—so placed that he can see the sentinels of the sentry squad. Two of the mounted orderlies have been sent as a patrol by Hancock avenue to the railroad cut near McGuire. (F.S.R., ¶183.) Captain A directs that a trench be dug on Merritt hill and that a patrol of three men be sent down the north branch of Corral creek to reconnoiter Corral creek and the grove opposite the mouth of the north branch.

He then visits Picket No. 3, keeping Lieut. B informed of his whereabouts. He finds that this picket has remained where it relieved the left flanking group of the advance guard—on the east end of the ridge north of Rabbit point. This position appears unsatisfactory to Captain A for the reason that it has not a good field of fire to the south. (F.S.R., ¶159.) He accordingly directs that it be moved to Rabbit

point. Such moves of detachments should be avoided when practicable; it is often better to leave them in a somewhat faulty position than to order them to move after the men have removed their equipments and established themselves. But in this case there is no help for it; the picket is about 200 yards in rear of the line to be defended and is separated from it by a deep gully.

This picket has not stacked arms, but the men have removed their packs and are resting, each man having his rifle within his reach; the picket commander explains that this precaution was taken because the enemy was believed to be near and no nearby post of observation had yet been found giving a good view of the ground in the direction of the enemy.

A cossack post is sent to the railroad track east of Rabbit point, to watch the railroad south of Corral creek and to prevent hostile patrols from making their way north along the river bank. Another cossack post is sent to the south end of the old embankment overlooking the bridge over Corral creek on Farragut avenue. A small patrol is sent to work its way up Corral creek and ascertain whether or not the enemy is occupying Grant hill.

Captain A now returns to Picket No. 2 and makes a report of his dispositions to the battalion commander, as shown on the following page.

Reports are also made to Capt. A by the picket commanders as soon as practicable after taking up their positions. The following is given as an example.

Picket No. 1	Merritt hill	
1 Oct. 07,	3-40 P. M.	No. 1.
To Capt. A,		
Pope hill.		
Position, see sketch on back.		

Have communicated with Picket No. 2 and sentry squad at INFANTRY BARRACKS.

Patrol sent to railroad cut by HANCOCK avenue —another to CORRAL creek.

C,
2d Lieut.

Additional Situation, Blue Outpost;

At 4-10 p. m. Captain A has information thru his patrols and sentinels that the Reds are occupying the hills south of Corral creek and east of Grant avenue, also that Corral creek is insignificant as an obstacle. What changes does he make in his dispositions?

The information obtained is transmitted promptly to Major X. The role of an outpost is defensive simply, so Capt. A does not consider attacking the enemy.

Captain A is now of the opinion that the enemy is in his front in considerable force and as the intentions of the enemy are not known, it will be necessary for the outpost to increase its vigilance and take additional precautions during the night. An enemy might pass unobserved between the pickets at night unless additional provisions for observation were made. If Corral creek were an effective obstacle it would be necessary only to watch the bridges. Roads leading toward the enemy must always be watched at night, for an advance off the roads, of an enemy in force, would be difficult and slow and almost certain to be discovered. Outposts often perform their tasks at night by merely placing detachments on the roads leading in the direction of the enemy and occasionally patrolling between them. The employment of patrols at night is open to the objections that the work is very fatiguing, patrols sometimes lose their way, and their movements are likely to disclose the posi-

tion of the sentinels. On this account it is advisable to substitute cossack posts for patrols when practicable.

In order to bring an approaching enemy in view on the sky line, sentinels should be placed on low ground at night. It is usually better to push them forward from high ground rather than draw them back in order to retain possession of the high ground. (S. & I., p. 70.) Since the enemy is close in front of the Blue outpost and occupies positions from which he can overlook the ground in front of it, sentinels pushed forward in daylight would be seen by him. In this case, therefore, the changes for the night should be arranged for during daylight and carried out after dusk. (F.S.R., ¶148.)¹

Captain A revisits the pickets about 5 p. m., and ascertains the plans of the picket commanders for the night. He directs such modifications of these plans as seem necessary and further directs that the change to the night positions be made at 7:20 p. m., which, at this season, is after dusk. The pickets remain in their day positions, but cossack posts are sent forward as follows: From Picket No. 1, three (one of them on Prison lane); from Picket No. 2, four; and from Picket No. 3, three. They are posted so that an enemy could not pass between them without being seen or heard.

Provision is also made in each picket for a visiting patrol.² In order to secure a maximum of vigi-

1 If the ground in front of the outpost line cannot be seen by the enemy, as, for instance, when the front is covered by cavalry, it is preferable to make the changes for the night during daylight.

2 A visiting patrol usually consists of two or three men and is sent from a picket or support at intervals at night or in foggy weather (once an hour when great vigilance is desired) to visit sentinels and ascertain whether or not they are alert and if they have anything to report. They may also be directed to visit adjoining sentinels posted from other pickets or supports, or to visit adjoining detachments.

lance with a minimum of fatigue, Captain A arranges that a signal will be made every hour by each cossack post—by striking a match held so that it cannot be seen except in the direction of the picket. The visiting patrols are not to be sent out unless a failure to signal is noted or unless there appears to be some need of visiting a particular post.

No patrols are sent in front of the sentinels at night. The sentinels are ordered to regard everyone coming from the front as an enemy; this precaution is taken on account of the close proximity of the enemy and because the Blue battalion is in an isolated position and in hostile territory.

The cossack posts are not relieved till daybreak, at which time the outpost resumes its day positions.

Captain A could not use cavalry in front of his outpost line, even if he had it; but cavalry would be very useful to him if posted on his right flank.

The situation is a very favorable one for the employment of spies. A spy disguised as a citizen of the country would probably find no difficulty in entering Leavenworth from the west or south and in learning from the citizens of the town the strength and composition of the Red force.

OUTPOST*--INFANTRY AND CAVALRY

Situation:

On October 3, a Red division is advancing via Platte City, Mo., on Fort Leavenworth, Kansas. A Blue division is concentrating at Atchison, Kansas. The Missouri river forms part of the boundary between the territories of the Red and Blue forces. Plum creek and Salt creek are fordable with difficulty.

A Blue detachment consisting of
1st Infantry,
1st Squadron, 1st Cavalry,
1 section, Company A, Signal Corps,

has been sent from Atchison to observe hostile troops reported to be crossing the Missouri river at Fort Leavenworth. At 3 p.m. when the leading element of the infantry of the advance guard is one mile west of Schweizer (northwest of Kickapoo), the detachment commander, Col. X, is informed that the Blue cavalry squadron has encountered Red cavalry on Plum creek and has driven it to the bridges over Salt creek on the Millwood road and near Frenchman; that at both of these bridges the Blue cavalry has been repulsed by the fire of additional Red troops; and that the Blue cavalry is now assembling at the Taylor S. H. cross-roads. What action does Col. X take, and why?

The information of the enemy seems to indicate that the enemy intends to invade the Blue territory and, realizing the importance of the bridge across the

*Map of Fort Leavenworth, Kansas, and Vicinity, 4 in.=1 mile.

Missouri river at Fort Leavenworth, has pushed part of his division forward to seize and hold it. A division has a regiment of cavalry; for so important a mission it is probable that the greater part of the regiment has been employed; and the cavalry may be supported by other troops. Since the report that the Red troops were crossing the Missouri river at Fort Leavenworth was received before the Blue detachment left Atchison (a distance of 14 miles, probably 5 or 6 hours ago) it seems likely that a considerable part of the Red division—probably a detachment of all arms—may have crossed. Such a detachment would probably halt in the vicinity of Fort Leavenworth and place an outpost on the Sheridan drive ridge or along Salt creek to cover the crossing of the remainder of the division. It appears probable that the Red cavalry encountered on Plum creek consisted of patrols of a Red advance guard or outpost. The lateness of the hour (3 p. m.) and the failure of the enemy to pursue the Blue cavalry when repulsed add to the probability that the Reds have halted and are not, at present, acting aggressively.

The inhabitants of Kansas are in sympathy with the Blues; this fact will make it easier for Col. X to obtain information of the enemy, and renders it improbable that the enemy is possessed of complete information in regard to the Blue detachment.

The Blue division appears to contemplate permitting the Reds to cross the Missouri river without attempting to destroy the bridges or opposing them on the river line. This may be because they have not completed their mobilization and have not had time to do so; or the Blues may be awaiting a favorable opportunity to attack when the Red division has crossed the river in whole or in part. Such an opportunity may reasonably be expected while the Red division is astride the river, or when it has the river at its back.

Colonel X's mission (to observe the Red invading force) is of the utmost importance, as the information gained may indicate the proper time to attack.

But this mission does not devolve on him an offensive role, except when aggressive action is incidental to the acquisition of information. He has established contact with the enemy. By examining the map he sees that Kickapoo is a favorable post for observation, being situated on the flank of the enemy's probable line of march. Spies can probably be employed there, who, with the aid of friendly inhabitants, should be able to gain complete information of the enemy. He also sees that since his cavalry occupies the right bank of Plum creek, his infantry can probably reach Kickapoo without being observed by the enemy, and that the greater part of the village is screened from observation from the south and east by high ground at its southern edge.

Kickapoo is a scattered village with plenty of open and well drained ground in and around it; it has a railroad and telegraph line communicating with Atchison; it has two wagon roads running to the south which facilitate reconnaissance or aggressive action in the direction of the enemy; and it has two roads running west which would facilitate retreat.

It appears from the data that the Blue cavalry has been acting independently during the march from Atchison. This arrangement has given it better opportunities for reconnaissance than if it had been held with the infantry column. Small detachments of cavalry might have discovered the Red cavalry on Plum creek as soon as the squadron has done, but they might have been unable to force it back and discover the location of the supporting troops at the bridges. It is assumed that the signal corps section

has kept Colonel X in communication with Atchison and with his cavalry.

The ridge at the southern edge of Kickapoo possesses defensive strength and is at a convenient distance from the village; but the field of fire from it toward the south is limited at less than 300 yards' range by orchards, and the eastern extremity of the ridge (Kickapoo hill) is not well adapted to defense, as it has a dead space at its base, and an enemy could approach it under cover of Plum hill and hill 897.6. A line along the south edge of the orchards and along the ridge which terminates at Plum hill has a wider field of fire and has, excepting parts covered by minor features, an unbroken view of the valleys of Plum and Salt creeks. This line seems well adapted to the use of an outpost, as its left flank rests on the river and it affords a view and field of fire covering all approaches from the south and southeast. This line can be approached from the north under cover, is of sufficient extent for the deployment of the entire detachment, and is not too far from Kickapoo to be promptly reinforced from there.

Colonel X considers the advisability of placing an outpost still farther south. The ground slopes gradually from Plum hill south to Plum creek, just beyond which it rises abruptly; still farther south the ground is open and rolling. As the ground north of Plum creek is commanded by that on the south, the creek cannot be used as a defensive line by troops facing south.

A line farther south (hill 880—J. Aaron—hill 862) possesses the advantages of holding the crossings of Plum creek and of giving a view of the ground near the enemy. But if this line should be vigorously attacked it would be difficult to reinforce it or to withdraw from it. Troops retreating across the open ground north of the creek would be in danger of suf-

fering heavy losses from the fire of troops on the higher ground south of it. And besides, this position is practically enfiladed from Salt creek hill and other heights in that vicinity; and these heights are believed to be in the possession of the enemy.

Colonel X decides to camp at Kickapoo, with an outpost on the approximate line L. A. Aaron—Plum hill. Since observation is the predominant element of his mission, and since he desires to make this observation as close and effective as possible, he makes the outpost strong in cavalry and directs more extended reconnaissance than would ordinarily be necessary. If the only purpose of the outpost were to provide for the security of the detachment, but little cavalry would be assigned to it, since there is a good post of observation for the infantry, and because outpost duty is very exhausting to cavalry. A commander who wishes to keep his cavalry in good condition will use it sparingly on outpost duty.

Col. X does not expect an attack from the west, and he relies on his cavalry and the friendly inhabitants for early information of any hostile move in that direction; but the consequences of an attack from that direction would be so serious—throwing him back on the river and jeopardizing his line of retreat—that he orders the roads to the west to be observed.

Colonel X therefore issues the following verbal order at 3:10 p. m. to his staff, the infantry field officers and Captain Z, who are assembled for the purpose.

“Hostile cavalry has been encountered on Plum creek and driven by our cavalry to the bridges over Salt creek, near Frenchman, and on the Millwood road. Additional hostile troops were found at both bridges. Our cavalry is near Taylor schoolhouse.

“This detachment will camp at Kickapoo.

"Major A, with Companies A and B, the machine gun platoon and six mounted orderlies, 1st Infantry, and one troop, 1st Cavalry, will form the outpost, hold the line L. A. Aaron—Plum hill and patrol the roads west and south of Leavenworth.

"Battalion and squadron commanders will each send an officer to report to Captain Y at the northwest exit of Kickapoo for assignment of camp sites. Captain Z is detailed as officer of the day. The 2d Battalion, 1st Infantry, will furnish the interior guard and will post a sentry squad on hill 1000, northwest of Kickapoo. The 1st Squadron, 1st Cavalry, will send out patrols on the roads west of Kickapoo. In case of attack the outpost is to be supported.

"The baggage train will come up to camp; the wagons of the outpost may join it.

"Messages will reach me at the Kickapoo school-house."

A staff officer is sent to the cavalry commander to acquaint him with the substance of the foregoing order and to direct him to withdraw his squadron (excepting the troop to be detailed for outpost duty) as soon as the outpost is in position.

Comments

The information of the enemy contained in the "Situation" (viz., that a Red division is advancing via Platte City on Fort Leavenworth) is not included in the order because it is assumed to be generally known or to have been communicated in a previous order.

Colonel X avoids stating that the Blue cavalry has been repulsed, as this information is thought to be unnecessary and of a discouraging nature. It is assumed that the 1st Battalion, 1st Infantry, has formed the advance guard during the day.

Colonel X's order is issued without halting the column, and is based on recent information and a study of the map. It would be desirable in some respects to make a personal reconnaissance of the vicinity of Kickapoo before issuing the order; but the order for the daily halt should be issued promptly and, when practicable, before the end of the march. If Colonel X should personally inspect the camping grounds before issuing his order for the detachment to go into camp, it would probably compel the troops to make a wearisome halt of uncertain length on the road. A staff officer is usually sent ahead to select and assign the camp ground, but it will seldom be necessary to await a report from him before issuing the order.

"Any delay will deprive the troops of some of their rest. Therefore it is advisable to make arrangements promptly, even if it should be necessary later to make some change." (Griepenkerl, p. 308.) Except when in the presence of an aggressive enemy, camping places are usually selected on account of giving convenient access to water, shelter, supplies, or communications, and are rarely selected with reference to the suitability of the adjoining ground for the outpost. An outpost must utilize, as well as it can, such features of the ground in the vicinity as are favorable for observation and defense. But the most important questions which arise in regard to an outpost—its strength, composition, general location, conduct in case of attack, etc., must be decided by the commanding officer, for they depend upon the military situation and upon his plans, and no other officer can be so well acquainted with these things as himself.

Cavalry should not be detailed to watch an unfordable river or a marsh impassable for horses. And where the country is so open that all needful

observation can be done from the supports (as was often the case in the recent war in South Africa) the cavalry may well be spared. Dense woods and rough ground near the outpost line can be observed better by infantry than by cavalry. Outposts which are in close contact with an enemy cannot use cavalry in their front.

But where the outpost is weak, the view limited, and an extensive front is to be covered, cavalry is extremely useful in furnishing posts of observation beyond the reach of other arms, and in patrolling tracts which cannot be observed in any other way. And when no attack is expected and the duty of the outpost consists more in observation than in resistance, the outpost should have a large proportion of cavalry.

The general position of the outpost is determined by the commanding officer and will depend on the information in regard to the enemy and other elements of the military situation. The exact location of the line, the manner in which it is to be occupied and the mode in which the outpost will execute its mission are, as a rule, entrusted to the outpost commander; for these details depend largely on the ground —with which the outpost commander is usually better acquainted than is the commanding officer.

It is important that the outpost commander should know what the commanding officer desires him to do in case of attack. If the outpost occupies the line which is to be used as a defensive line by the entire command in case it is seriously attacked, it is clear that the outpost must hold it stubbornly. If, however, the chief function of the outpost consists in giving timely information of any approach of the enemy, it is usually composed largely of cavalry, is posted well to the front, and its commander concerns himself more with arrangements for withdrawing it

promptly than with preparations for defense, in order that, when forced to retire, it may do so with little loss and without masking the fire of the main body.

Whenever practicable, the outpost commander should be informed of the time when the outpost is to be relieved, as this information will enable him to make better arrangements for the comfort of the troops and for equalizing duty.

The commanding officer should permit the baggage wagons to join the outpost—if only for an hour or two—whenever it is practicable to do so. But when the wagons cannot be sheltered from the fire of the enemy, would block important roads, or would be likely to fall into the hands of the enemy, they must not be sent forward.

When the line of defense selected for the main body does not coincide with the outpost line of defense, the outpost commander should be informed of the location of the former. This information is usually contained in the order establishing the outpost.

Additional Situation, (Blue outpost):

No additional information of importance is received by the outpost commander, Major A, except that after the outpost is established the Reds keep touch with it by means of cavalry patrols. How will Major A perform his duty?

A command on the march gains a degree of security from the mere fact that it is in motion. On account of its continual change of position it can seldom be attacked by any fully prearranged method. But when it halts, and especially if the halt is of considerable duration, an enemy has time to reconnoiter its position and form a complete plan for attacking

it. When troops are resting they cannot reinforce their covering detachments as quickly as when they are in motion under arms. Greater precautions must, therefore, be taken by an outpost than are necessary in the case of an advance guard, a flank guard or a rear guard.

An outpost usually fulfills its mission wholly or in part by placing covering detachments on or near a line which it is to use in checking or delaying the advance of an enemy; this line is usually referred to as the "outpost line"; its distance from the position of the main body depends on the nature of the ground and the plans of the commander and cannot be subjected to any rule. If the outpost line is long it is usually divided into several parts, called "sections"; and a detachment called a "support", is assigned to each section.¹ In case the outpost is reinforced by the main body and the outpost line thus becomes the defensive line of the entire force, the sections of the outpost line naturally become the sections of the defensive position.

Supports are usually placed on the principal avenues by which an enemy could approach. It is a general rule in establishing outposts to place a support on the most important road intersecting the outpost line and leading in the direction of the enemy, and then to make the rest of the outpost conform to this arrangement. All avenues of approach must be guarded, but routes of minor importance may be sufficiently guarded by pickets or lesser groups.

¹ The word "section" is used in this sense in the Field Service Regulations (Pars. 145, 147 and 152); in Swift's Field Orders, Messages and Reports; and in Griepenkerl's Applied Tactics (p. 352). The same word, however, is used in Wagner's Security and Information (p. 53) to mean a sector or part (of an outpost) to which a separate commander is assigned and appears to be used with this meaning in Pars. 142 and 143, F.S.R. A "section" of the latter sort might have a separate reserve and separate outpost cavalry, and is really a separate outpost.

When a good view of the ground in front can be obtained from the outpost line, it is not necessary to send sentinels or groups from it. But when the view from the line is limited, sentinels or groups are placed at good points for observation which are usually in front of the line, tho they may, in some cases, be behind it. When, in exceptional cases, these groups are made strong enough to possess a considerable power of resistance they are called "pickets." These sentinels and groups, when employed, are established by the commanders of supports, who are charged with the supervision of the work of observation in the immediate front of their sections. Supports are usually composed of infantry, but sometimes small detachments of cavalry are assigned to them for the purpose of assisting in the work of observation.

But when it is desired that a line of observation be established at a considerable distance (a mile or more) beyond the supports, a detachment of cavalry is usually assigned to the task by the outpost commander. Such a cavalry detachment sent out by the outpost commander and independent of the supports is usually called "outpost cavalry" or "advance cavalry."

Sometimes reserves are placed in rear of the outpost line for the purpose of reinforcing parts of it requiring support. The posts of such reserves will be determined by the availability of cover and the location of routes by which the line can be readily reached. Sometimes one or more of the supports are made strong enough to reinforce others in case of need; this arrangement has the advantages of reducing the dispersion of the troops and of making the outpost line stronger at the outset.

Colonel X's order prescribes the location of the outpost only in a general way and gives no definite

instructions as to its duties except in regard to patrolling west and south of Leavenworth. The patrolling ordered by Colonel X is only that which would ordinarily be regarded as beyond the sphere of the outpost. If Colonel X had ordered that the Kickapoo-Frenchman road or the Atchison Pike be patrolled, he would have been ordering the performance of an obvious duty and shown a lack of confidence in the outpost commander.

Major A learns from the order what is known of the enemy and the location of the cavalry. The order which details the outpost, however, withdraws all of the cavalry except the troop designated for outpost duty. It is important that the outpost should take up its position promptly so as to cover the front when the cavalry is withdrawn. The cavalry should continue to cover the front until the outpost is in position. (Griepenkerl, p. 308.)

The commander of the troop (A, 1st Cav.) assigned to the outpost will desire to know whether his troop is to act as "outpost cavalry," having a measure of independence—i. e., occupying an advanced line of observation and reporting directly to the outpost commander—or whether the troop is to be divided among the supports or held in reserve. The first arrangement facilitates observation at a distance from the supports; but when an enemy is close in front of an outpost, cavalry cannot be used in this manner. Nothing is gained by using it as outpost cavalry unless it can be pushed well to the front—beyond the range of effective rifle fire from the supports. In the case before us, no benefit could be derived from placing a cavalry line of observation on Plum creek or anywhere north of it; for nothing could be seen from here which could not be seen from the outpost line, and the cavalry would mask the fire of the infantry. Cavalry may be placed on a flank of an out-

post line; in such cases it may form one of the supports or, if beyond easy communication or if for any other reason it seems desirable to give it freedom of action, it may be designated as outpost cavalry. The employment of cavalry on an advanced line of observation increases the depth of the outpost and enables the outpost to begin the work of delaying an advancing enemy earlier than could otherwise be done. This cavalry line also serves as a screen preventing reconnaissance of the outpost by small hostile patrols,

Major A must decide—more definitely than has been done by Colonel X—upon the line which he will defend if attacked; whether or not part of the outpost troops will be held as a reserve; how many supports there will be; the limits of the sections of the line to be assigned to each; the approximate location of the supports and of the reserve (if any).

When a good post of observation is at hand, the outpost commander usually makes a personal reconnaissance of the ground before deciding these questions, but if this involves a delay the outpost may be ordered into position by reference to the map alone. Changes of position which are afterwards found to be necessary will be made in either case.

After receiving Colonel X's order, Major A directs the outpost companies to march to the south-eastern exit of Kickapoo. He then gallops to hill 900 at the south edge of Kickapoo, makes a rapid examination of the outpost position and of the ground in front of it, comparing the ground with the map, and when the outpost companies come up, assembles the infantry officers and issues, verbally, his orders for the day dispositions of the outpost.

Inasmuch as strong parties of Red troops have been encountered at both of the bridges (about 3000 yards apart) on Salt creek, and because these

parties appear to be stationary and not aggressive, Major A infers that he is confronted with an outpost which probably is stronger than his own and occupies the Sheridan drive ridge as its defensive line. He is of the opinion that the hostile cavalry met on Plum creek was a part of the Red outpost cavalry which may have occupied a line of observation on the hills west of Salt creek, with supports at the bridges.

The troops assigned to his own outpost are strong in cavalry and relatively weak in infantry, tho the machine gun platoon adds greatly to its defensive strength. From the composition of the outpost and because extensive reconnaissance is ordered, it appears that Colonel X is not particularly apprehensive of being attacked but is especially desirous of gaining information. This inference is made clearer by taking into consideration the mission of the Blue detachment, which is assumed to have been communicated by Colonel X to his subordinates in a previous field order.

From personal observation, supplemented by a study of the map, Major A sees that the principal avenues of approach from the direction of the enemy are the A. Daniels-Schweizer road, the Frenchman-Kickapoo road, the Millwood road and the Missouri Pacific railroad; but since Salt and Plum creeks are fordable and there are no other serious obstacles in front of the position, the enemy might advance over ground between the roads; the whole front must, consequently, be watched and guarded. However, the creeks can be forded only with difficulty, and the enemy could not approach rapidly except on the roads and bridges; the roads and bridges must therefore be given special attention.

The line which the enemy is believed to occupy—the Sheridan drive ridge—is advantageous for observation and commands the Blue outpost position; care

must therefore be exercised to place the supports and observation groups under cover.

South of Plum creek undulations of ground are seen, some of which would doubtless form advantageous posts of observation; but they are too far from the outpost position selected by Colonel X to be occupied by infantry, especially as a serious obstacle (Plum creek) lies between. Major A can not determine exactly, from his position on hill 900, which of these undulations would be the best posts of observation; if cavalry is placed there its commander should be permitted to arrange the details of its disposition. These undulations conceal from Major A ground over which an enemy might move without being seen from the outpost; it consequently seems necessary to post some cavalry there; moreover, by placing cavalry there, the reconnaissance ordered by Colonel X will be greatly facilitated.

In selecting the outpost line in detail, Major A notes that the line L. A. Aaron—M. Aaron—hill 897.6—Plum hill has a good field of fire and view to the front; that it commands within effective range the three crossings of Plum creek and all ground over which an enemy could approach; and that it affords concealment from the view of the enemy and cover from his fire.

The length of this line (over 2000 yards) is so great that it appears advisable to divide it into sections. These sections must be accurately described in order that the support commanders may understand clearly the limits of their responsibilities. The line is divided nearly equally by the Frenchman-Kickapoo road; this would make an easily recognizable dividing line, but, because it is the most important approach from the direction of the enemy, Major A does not select it. If it were designated as the dividing line between the supports, it might not

be adequately guarded by either of them. (F. S. R., ¶152.)

Major A decides to occupy the line L. A. Aaron—M. Aaron—hill 897.6—Plum hill; to use his cavalry (Tr. A, 1st Cav.) as outpost cavalry, with its line of observation on the hills south of Plum creek, and to entrust to it the reconnaissance specially ordered by Colonel X; to divide the outpost line into two sections and assign a company to each as a support; and to assign the machine gun platoon to the section from which it can effectively fire upon the three bridges.

Major A does not hold any part of the outpost troops in reserve, because the line which he must occupy is so long that it cannot be held with sufficient strength with less than the whole amount of infantry assigned to him. If one company were detailed as a support and the other held as a reserve, the support would be disseminated over such a wide front that one officer could not give it the close supervision required of a support commander. And besides, the main body is so close at hand that a reserve is not needed. Reserves are seldom found in such small outposts (F. S. R., ¶142); if a part of the line must be reinforced, it is usually done from another part of the line or from the main body.

Major A's first order (as has already been stated) is issued verbally to the assembled officers of Companies A and B and the machine gun platoon; it is as follows:

"Red cavalry has been met on Plum creek and driven to the bridges on Salt creek. More Red troops were found at these bridges. Our cavalry is at Taylor schoolhouse. The detachment camps at Kickapoo.

"Companies A and B, the machine gun platoon and six mounted orderlies, 1st Infantry, and Troop

A, 1st Cavalry, under my command, will form the outpost, and will hold the line L. A. Aaron—M. Aaron—hill 897.6—Plum hill.

“Troop A, 1st Cavalry, will take up a line of observation in the vicinity of the Millwood road, will keep touch with the enemy and will patrol the roads west and south of Leavenworth.

“Company A and 2 mounted orderlies, 1st Infantry, will take post at the orchard north of M. Aaron and hold the line from L. A. Aaron, inclusive, to the orchard 400 yards east of M. Aaron, inclusive.

“Company B, the machine gun platoon and 4 mounted orderlies, 1st Infantry, will take post at hill 897.6 and hold the line from the orchard 400 yards east of M. Aaron, exclusive, to the Missouri river.

“In case of attack we are to be reinforced.

“The wagons belonging to the infantry will join their organizations—the wagons of Troop A will halt at T. Meyers.

“Send messages to hill 897.6.”

This order is then transmitted by Major A's battalion adjutant, Lt. X, to the commanding officer, Troop A, 1st Cavalry.

It is assumed that Major A has control of three cavalry buzzers which have been habitually operated by the mounted orderlies who are assigned to the outpost. One of these buzzers is carried out to the cavalry, one to Company A, 1st Infantry, at M. Aaron, and the other is placed at hill 897.6. The signal corps section as a part of its routine duty maintains communication by wire between Major A at hill 897.6, and the headquarters of the detachment at the Kickapoo schoolhouse. Immediately after issuing his first order Major A sends a message to detachment headquarters as follows:

Outpost
3 Oct.

Hill 897.6
3-40 P. M.

No. 1.

To Adjutant,
Schoolhouse,
Kickapoo.

Troop A, 1st Cavalry, on MILLWOOD road.

Company A, 1st Infantry, at M. AARON.

Company B and machine guns, at hill 897.6.

I receive messages at hill 897.6.

A,
Major.

After sending this message, Major A visits the outpost cavalry, inquires into the dispositions made and orders necessary changes. He then inspects the infantry and gives necessary orders. By the time he returns to hill 897.6, he should have received the troop and company commanders' reports of their dispositions. Each report should be accompanied by a sketch showing the position of the unit reported upon. When a message blank is used for this purpose, the sketch is usually drawn on the back of the blank.

Major A then sends the detachment headquarters a second message, a copy of which is shown on the following page.

Additional Situation:

During the afternoon various Blue patrols endeavor to penetrate the Red lines, but are unsuccessful. Several Red cavalry patrols are seen west of Salt creek and are driven away by the Blue outpost cavalry. What changes in his dispositions, if any, will Major A make for the night?

At 6 p. m., Major A issues the following order, which is communicated by buzzer to troop and company commanders:

U. S. ARMY FIELD MESSAGE

CABLES, CIPHERS,
 TELEGRAPH, WIRELESS,
 LANTERN, HELIO.,
 FLAG, CYCLIST,
 MOUNTED MESSENGER,
 FOOT MESSENGER.
 (Underscore Means Used.)

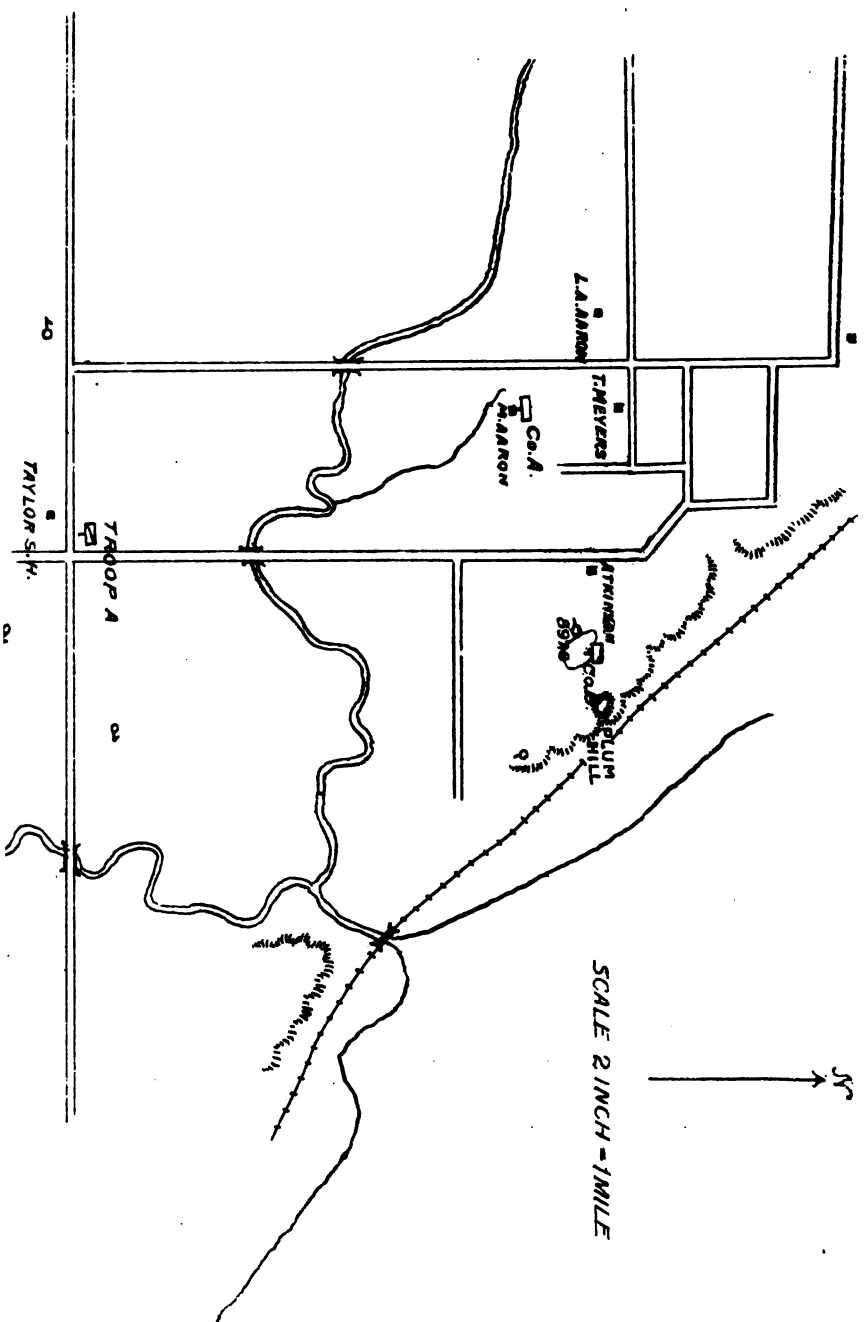
No.	Sent by:	Time:	Rec'd. by:	Time:	Check.
(Above spaces for signal operators only.)					

From *Outpost* At *Hill 897.6*
 Date *3 Oct. 07* Hour *4-40 P.M.* No. *2*

To *Adj't. 1st Inf.*
School House,
Kickapoo

Hostile patrols are seen west of SALT creek.
Position of outpost — see back.

Received *A.*
Major



SCALE 2 INCH = 1 MILE



"The position of the enemy remains unchanged. Hostile cavalry patrols have been seen west of Salt creek but have been driven away.

"The following changes will be made for the night.¹

"Troop A, 1st Cavalry will withdraw to T. Meyers at 7-15 p. m. leaving a platoon to watch the bridges over Plum creek on the Schweizer—A. Daniels road, the Frenchman-Kickapoo road and the Missouri Pacific railroad, and keep touch with the enemy. The day positions will be resumed at 5 a. m.

"Company A, 1st Infantry will move to the 23 cross roads and Company B, 1st Infantry, will move to Atkinson. Night positions must be occupied by 7 p. m. The day positions will be resumed at 5-15 a. m.

"Send messages to Atkinson."

¹ When the enemy can overlook the outpost position the changes to the night positions are not made until dusk. In such cases, the changes should be arranged for during daylight. (F.S.R. ¶148.) But if the outpost is screened from the view of the enemy the night positions may be taken before dark. Such changes in the positions of supports as are ordered here are exceptional. They are permissible here because the outpost commander wishes to have the supports on the main avenues of approach during the night and has reasons for placing them elsewhere during the day. But the changes from the day to night positions usually affect only the sentinels, cossack posts, sentry squads and other observation groups—more of them usually being employed at night than by day and their posts being shifted for various reasons. (S. & I., p. 70.)

AN ADVANCE GUARD*—INFANTRY

Situation:

A Blue force, in hostile country, is camped near Kansas City, Mo. A Red force is concentrating near Atchison, Kansas, about forty miles northwest of Kansas City.

A Blue detachment, consisting of the 1st and 2d Infantry, under Colonel X, has been pushed forward and camps on the night 20-21 September, 1908, on the northern outskirts of Leavenworth. The security of the camp is provided for by other troops.

At 8:30 p. m., Sept. 20, Major A, 1st Infantry, is handed the following order by Colonel X's adjutant:

Hq. Det. Blue Army,
Camp at Leavenworth, Kans.,
20 Sept. 08, 8 P.M.

Field Orders

No. 7.

TROOPS

(a) Advance Guard:

Maj. A.

1st Bn. 1st Inf.

8 mtd. orderlies, 1st Inf.

(b) Main Body—in order of march:

1st Inf. (less 1st Bn.)

2d Inf.

Det. 1st F. Hosp.

1. Hostile cavalry patrols were reported at FRENCHMAN this morning withdrawing in the afternoon toward KICKAPOO.

Blue reinforcements are expected to reach LEAVENWORTH by noon tomorrow.

2. This detachment will march tomorrow to KICKAPOO to capture Red supplies.

3. (a) The advance guard will precede the main body at a distance of 700 yards.

(b) The main body will march at 6-30 A.M., from the corner of GRANT and METROPOLITAN avenues, via the METROPOLITAN—64—ATCHISON CROSS—16—FRENCHMAN—17—47—KICKAPOO road.

4. The baggage train, under its present escort, will remain at LEAVENWORTH until further orders.

* Map of Fort Leavenworth, Kansas, and Vicinity, 4 in.=1 mile.

5. Reports will reach me at the head of the main body.

X,
Colonel,
Commanding.¹

Colonel X has determined the strength and composition of the advance guard. As it is ordered to precede the main body by a certain distance, its route and hour of departure will be regulated by the corresponding movements of the main body. (F.S.R., ¶ 96.)

Colonel X fixes the strength of the advance guard at one battalion. This is one sixth of the whole force, includes an entire tactical unit, and seems sufficient to carry out the general objects of an advance guard under the conditions presented by the proposed march. The question as to its composition is simplified by the fact that the detachment is composed wholly of infantry. That the detachment lacks cavalry is unfortunate, for a platoon attached to the advance guard would be of great assistance in patrolling, and in furnishing a cavalry point and flanking groups; this situation, however, might have been relieved to a greater extent by attaching more of the mounted orderlies to the advance guard.

After considering the object of the movement and the nature of the country—which offers fairly good defensive positions for temporary resistance—Colonel X decides that the advance guard should precede the main body by about 700 yards. With this distance there seems to be little danger of the advance guard being defeated or cut off before support could reach it from the main body, while the latter should have sufficient time to prepare for action. (F.S.R., ¶ 97.) A comparison between the length of

¹ The method of distribution of Colonel X's order is not stated on the copy received by Major A, such notation being usually made on the original order only.

the main body and its distance from the head of the advance guard will show that the rough rule—that the minimum distance should be equal to the depth of the main body—is approximately followed in this case.

The adjutant, having delivered Colonel X's order to Major A, informs the latter that the Colonel is especially desirous of gaining all possible information of the country and its inhabitants, as this is the first time that a Blue force has entered this section.

Major A first considers his mission. As advance guard commander, he must provide for the security of the main body and facilitate its march. The route he is to follow as well as the time of starting and the distance the advance guard is to precede the main body are all prescribed in the order he has just received. The manner of execution, however, is left to him. In considering this, he is greatly assisted by a study of the terrain as shown on the map with which he is provided. An inhabitant who has been sent to act as his guide is near at hand and helps to clear up many points upon which Major A is in doubt.

Major A remembers that the important features of the terrain to be considered in an advance are those affecting reconnaissance, as hills or woods; those that may impede the march, as streams or defiles; those that have defensive value or will assist the offense; and roads.

He notes that the country is generally hilly, and for the most part open and cultivated except for woods which fringe the creeks, and—to a greater or less degree—cover the slopes of the prominent hills. From the ridge which the advance guard will cross at 16, as well as from Sentinel hill, an extended view of the country may be obtained and the early approach of a hostile force in strength may be discovered.

Salt and Plum creeks are the only streams of any importance. They are insignificant as obstacles to infantry, although, due to their steep banks, cavalry would be somewhat delayed in crossing. The ridge extending southward from Government hill must be reconnoitered as far south as the stone quarry; for this part of the ridge flanks the line of march within easy rifle range. From Atchison Cross to Frenchman the detachment will pass through a defile, at first commanded by Government hill and farther on by Atchison, Sentinel and Eleven Hundred Foot hills.

Government and Atchison hills offer a good defensive position. Due to the rolling nature of the country north of Frenchman there are several positions where delaying actions might be fought, but all such positions can be easily turned. Sheridan's drive ridge is an important feature of the terrain, due to its command over the surrounding country. It is beyond effective rifle range of the line of march, but is within easy artillery range. While its distance from the line of march is too great to permit of its being covered by infantry patrols, some of the mounted orderlies might well be sent along the ridge for reconnaissance purposes.

The main road to be considered is the route prescribed for the march of column. Major A is informed by the guide that this road is in good condition and that the bridges over Salt and Plum creeks are ordinary highway bridges. The road 62—14 can be observed in part by flanking groups sent to reconnoiter the ridge from the stone quarry north to 16. The road 14—E—F—G can be covered (at least as far as F) by such mounted men as may be sent via Sheridan's drive. No roads other than these mentioned lie near enough to the line of march to permit of their being covered by patrols.

As to the enemy, little is known. It would seem, however, that he is not in great force; otherwise more than a few small cavalry patrols would have been seen. This supposition is strengthened by the fact that the patrols withdrew this afternoon. The country being hostile, Major A can not count on receiving any assistance or information from the inhabitants, while he may expect his own movements to be quickly reported to any hostile troops in the vicinity.

Major A knows that the support should be strong enough to carry on the reconnaissance which is its special function, and to brush aside any small bodies of the enemy that might attempt to delay its advance. The reserve should be of sufficient strength to afford considerable power of resistance. It should follow the support at a suitable distance (F. S. R., ¶98) and must be kept well in hand, ready to reinforce the support or, if need be, to hold a position until the main body can come up or deploy for action.

Having considered the situation as above outlined, Major A decides to place two companies in the support and to follow at about 500 yards with the other two as the reserve; to direct the support commander to send patrols via the stone quarry and Government hill, and to Atchison and Sentinel hills; to send five mounted orderlies from the reserve via Sheridan's drive and the Millwood road to the Taylor school house cross-roads, and to assign two of the remaining orderlies to the support.

Major A, who is of the opinion that no material change in the situation will occur during the night, has already sent word to his company commanders and battalion staff officers to report to him for orders at 9:00 p. m. At that hour he issues to the assembled officers the following verbal orders:

"Hostile cavalry patrols were reported at Frenchman this morning, withdrawing later toward Kicka-

poo. Blue reinforcements are expected to reach Leavenworth by noon tomorrow.

"Our detachment will march tomorrow to Kickapoo to capture hostile supplies at that place. The head of the main body will leave the corner of Grant and Metropolitan avenues at 6:30 a. m.

"Our battalion will form the advance guard and will march via the Metropolitan avenue—64—Atchison Cross—16—Frenchman—17—47—Kickapoo road.

"Companies A and B, with Privates K and L (mounted orderlies), under command of Captain B, will form the support¹ and will precede the reserve at 500 yards distance. The ridge from the stone quarry to Government hill will be reconnoitered. Patrols will be sent to Atchison and Sentinel hills.

"Companies C and D, with six mounted orderlies, will form the reserve and will clear the corner of 10th street and Metropolitan avenue at 6:30 a. m., maintaining a distance of 700 yards from the main body. Sheridan's drive will be covered by a mounted patrol sent out from the reserve.

"The baggage train will remain at Leavenworth until further orders.

"Reports will reach me at the head of the reserve." (F.S.R., ¶105.)

After receiving Major A's order, Captain B (the support commander) makes arrangements for a mount and provides himself with a map. He then considers his orders, and how best to carry them out. In this he is greatly aided by the map and by the guide whom Major A has turned over to him. He follows a course of reasoning similar to that followed by Major A, except that Captain B considers each point more particularly with a view to its effect upon

¹ The term *support*, as here used, corresponds to the term *vanguard* and includes all the elements in front of the *reserve*.

reconnaissance—the most important duty of the support. (F.S.R., ¶106.)

Having completed his estimate of the situation, Captain B forms the following decision: To place a company and a half in support with half a company 200 yards to the front as an advance party; this, in turn, will send forward about 100 yards a point of four men, flanked by groups of four men each to the right and left wherever the nature of the country permits and the reconnaissance to be effected warrants the fatigue entailed.¹

Captain B is aware that infantry patrols move slowly, especially across country, and cannot as a rule be sent far from the column on the march; they can scarcely do more than cover the main road. However, by sending such patrols in advance to the several high points along the line of march, the work of reconnaissance may be greatly facilitated. Patrols should, as far as possible, be sent out from the advance party rather than from elements in rear thereof; by this arrangement, the march of the column is less likely to be delayed and the patrols will have more time for reconnaissance.

The support commander selects 1st Lieutenant C to command the advance party, secures a map for him, points out the various features of importance, and explains his views and wishes as to the conduct of the advance party. He especially cautions him that patrols which are to be sent some distance from the line of march be started out promptly; that all

¹ This distribution is in accordance with the principle that the elements of the advance guard should increase in size from front to rear, each element protecting the one immediately in rear. The advance party is made strong, because Captain B intends to send most of his patrols out from that element. Some of the patrols will probably be unable to rejoin the advance party, except during halts; hence, if the advance party were not made strong at the start, it would have to be reinforced during the march.

patrols must thoroughly understand the signals for communication and that each patrol should be informed of the approximate routes of the others, in order that the danger of one patrol mistaking another for the enemy may be lessened.

At 6:30 a.m., September 21, 1908, the detachment is disposed as follows:

The point, consisting of four men under 2d Lieutenant D, is on Metropolitan avenue about 350 yards west of Twelfth street. The two leading files are nearly abreast but on opposite sides of the street. About fifty paces to the rear are the lieutenant and one man similarly placed, while fifty paces farther to the rear is the remaining man, who is particularly charged with watching for signals from the flankers and advance party. An officer is put in charge of the point because of the importance of its duties, particularly in the absence of any advance cavalry.

A patrol of four men is moving to the U. S. Penitentiary with instructions to reconnoiter the country from one of the towers. They are to join the support or the reserve at Atchison Cross via the road leading thereto from the Penitentiary.

A group of six men, sent out from the support, is moving via Metropolitan avenue and Twentieth street to the stone quarry; thence it will march along the ridge road over Government hill and will join the support or reserve near 16. This patrol has already been marching several minutes and is now near 62. It was started early, and made rather strong, because of the long detour.

The advance party, consisting of the remainder of the platoon, follows in column of twos about 100 yards in rear of the point. Lieutenant C is at the head of the advance party. He carries a map of the road and is charged with seeing that the right road is followed.

About 200 yards farther to the rear a company and a half follow in support, Captain B and the guide riding at the head. A connecting file (2 men) marches between the advance party and the support. Major A with two companies in reserve follows the support at about 500 yards.

The head of the main body is at the intersection of Metropolitan and Grant avenues about 700 yards in rear of the reserve. Two connecting files march between the support and the reserve and two between the reserve and the main body. Men have been detailed from each fraction of the advance guard to watch for signals from the flanks and from the bodies in front and rear.

The march begins promptly at 6:30 a. m., the point moving out westward along Metropolitan avenue. At 64 Lieutenant C sends a patrol of three men to the top of Avenue hill to gain a view of the country to the west and north and then to rejoin the advance party. The line of march as far as 14 is so open that no further reconnaissance to the east or west is necessary until the point approaches the U. S. Penitentiary—stone quarry railroad, when Lieutenant C sends three men to reconnoiter the woods along Twentieth street and join the support at Atchison Cross. At this time a patrol of five mounted orderlies is sent forward from the reserve by Major A with orders to move via Atchison Cross, Hancock avenue, Sheridan's drive and the Millwood road, rejoining the advance guard at the cross-roads east of the Taylor schoolhouse. It is to reconnoiter enroute the railroad cut north of Atchison hill. The leader reports his mission to Captain B and Lieutenants C and D as he passes them.

When the point is near Atchison Cross, three men from the advance party are sent through the woods just east of the road to the top of Atchison

hill, with instructions to reconnoiter the country from the top of the hill and then move through the wooded hollow and join the support or reserve near G.

The point does not delay its march but, increasing its vigilance, continues its advance, followed by the entire advance guard. As the advance party reaches the crest of the hill, Captain B rides up and joins Lieutenant C. They can now obtain a good view of Salt creek valley, Sentinel hill and the collection of houses at the base of the hill. They consult their maps and examine with their glasses the wooded slopes of Eleven Hundred Foot hill which for half a mile flanks—within easy rifle range—the line of march of the Blue detachment. Captain B gives orders for a patrol to be sent over the spur of Government hill to the railroad along the foot of the ridge. It will reconnoiter the northern slope of Eleven Hundred Foot hill, thereafter following the A. T. & S. F. railroad as far as the Atchison pike and then will join the support or reserve at Frenchman. A patrol is also pushed rapidly forward to Sentinel hill with orders to remain in observation until the point of the advance guard reaches Frenchman when it will move to the bridge about 400 yards north of Frenchman, reconnoitering the woods on its way.

The conduct of the patrols has been as follows:

The flanking group sent out to reconnoiter from the U. S. Penitentiary had reached there when the advance guard began its march. A few minutes were spent by the patrol leader in reconnoitering from the tower. The roads leading north between Grant and Hancock avenues were visible and the intervening country, except for a few ravines and small clumps of trees, was well overlooked as far as Fort Leavenworth. There being no signs of the enemy, the patrol moved to Atchison Cross where it

joined the support and reported to Captain B. The patrol sent along Twentieth street also reported at Atchison Cross. Lieutenant C was notified of the return of these patrols.

The flanking group sent from the support via the stone quarry and Government hill had almost reached 62 when the march began. It experienced some difficulty and delay along the trails on the ridge, but succeeded in joining the reserve at 16 as directed, reporting to the advance guard commander that no signs of the enemy had been discovered. The return of the patrol and its report were communicated to Captain B.

During the progress of the march Captain B has habitually remained at the head of the support, although he has frequently ridden forward to the advance party. Owing to the nature of the country, most of the patrols have been sent out from the advance party in order to get them out in time. As Captain B has personally to supervise the reconnaissance he is obliged to confer often with Lieutenant C and explain the measures that he desires adopted from time to time. Captain B realizes that the Government hill crossing offers exceptional advantages to the enemy for resistance and is relieved when the crest is gained without incident. While he is still observing from the hill, the advance guard commander rides up and joins him. Major A has noted the strength of this position and has pressed forward the reserve with a view to securing it as soon as possible. Captain B then rides on to join the support. Major A awaits the arrival of the reserve and sends a report to the detachment commander that so far no signs of the enemy have been observed.

The point and the advance party are now approaching the little settlement at the base of Sentinel hill. It consists of about a dozen houses loosely

strung out on both sides of the road. Its shape is not suited to defense; moreover nearly all the houses are of wood, affording no protection from fire. As the patrol sent forward from 16 to Sentinel hill had preceded the point and is at this time climbing the hill, no delay seems necessary in approaching the settlement. As a precautionary measure, however, Lieutenant C instructs the point to push well to the front while the advance party moves forward more slowly. Two small flanking groups are detached to reconnoiter both flanks of the settlement and rejoin the advance party at the western exit. The point found the house on the western edge of Atchison hill to be vacant, but the house at the railroad crossing is found to be occupied. Its occupants disclaim any knowledge of the enemy and state that no Red soldiers are in the village and that there is neither a postoffice nor telegraph station. The point, after signalling to the advance party that all appears safe, proceeds quietly along the road through the settlement. The advance party closes up rapidly, reconnoitering the railroad cut and the road to the right. As the point proceeds along the road, various inhabitants are questioned, but no information is obtained until a boy about ten years of age is found who says that he saw some other soldiers yesterday and that they bought some lunch at the village store. The storekeeper, upon being questioned, at first disclaims any knowledge of the enemy but later, when told of the boy's statement, admits that four mounted Red soldiers rode into the settlement yesterday; that they did not stay long, but questioned the inhabitants as to whether there were any Blue forces in that vicinity and, on being informed that none had been seen, rode off in the direction of Frenchman. He also said that the Red troopers had told him that there were more Red soldiers in Kickapoo, but he declared that he did

not know whether they were few or many, mounted or foot. Lieutenant C sends the storekeeper to Captain B with a report of what he has said, and then continues his advance. The flankers join him at the western exit of the village as directed. They have discovered nothing, but those on the left flank have exchanged signals with the patrol on the A. T. & S. F. railroad.

In the meantime the patrol which was sent over Atchison hill has joined the reserve as it passed G. It reports to Major A that it has discovered no indications of the enemy. Captain B is informed of its return and report.

Captain B does not consider it necessary to halt the support while the advance party reconnoiters the little settlement. On entering the village he questions the inhabitants sent him by Lieutenant C and others, but is unable to gain any additional information, so he releases all except the storekeeper whom he sends to Major A with Lieutenant C's report. Major A in turn sends the man and the report back to the detachment commander.

When opposite the Baker house, Lieutenant C sends out three men with instructions to reconnoiter the western slope of the ridge extending from that house northward toward Frenchman. This patrol is to establish communication with the patrol on the railroad and is to join the support or reserve at Frenchman.

As the point approaches the orchard south of Frenchman, a countryman on horseback is seen to leave the Gauss farm-yard, enter the main road a short distance in advance of the point, and then turn in the direction of Frenchman. He is promptly halted by the point, questioned sharply by Lieutenant D and informed that he cannot precede the column. (F.S.R., ¶109.) The farm house and orchard are

reconnoitered by a small patrol which rejoins near the bridge.

On reaching the bridge at Frenchman, the point examines it and, finding no indications that it has been tampered with, promptly crosses to the Frenchman house, which it reconnoiters. No information of value is obtained from the occupants. The point then turns due north and follows the Kickapoo road.

Just as the advance party passes Frenchman, the signal "Halt" is received from the rear. Captain B rides up and states that the main body has halted near the settlement south of Sentinel hill for fifteen minutes' rest. As the halt is only for a short time—the command having been on the march for about an hour—no attempt is made to establish a regular outpost. The advance party is, however, moved about 300 yards north of Frenchman. The point is pushed across the small bridge and takes position on the hill just beyond, while a patrol is sent to reconnoiter the woods along Salt creek east of the point. The support is halted at Frenchman. From it a patrol is sent west on the Atchison pike toward the railroad with instructions to reach some point from which to overlook the country to the west and north. It will remain in observation until the march is resumed when it will join the reserve. (F.S.R., ¶107.) Major A halts the reserve in the orchard south of the bridge; here it is screened by the trees and is within easy supporting distance. He then joins Captain B at Frenchman and discusses with him future measures to be adopted.

Both Major A and Captain B are aware that, after the bridge 400 yards north of Frenchman is crossed, the Blue line of march is commanded on the west by high ground extending northward beyond the Millwood road and within effective rifle range. Some reconnaissance of this high ground must be

undertaken. From this high ground a spur (on which are the Moss and Taylor houses) extends southeastward and then (near Dolman's) turns northeastward terminating in a hill a half mile east of the Taylor house. This section also must be reconnoitered.

As a result of these observations, it is decided to send a flanking group of eight men from the support along the A. T. & S. F. railroad to the point where it crosses the watercourse—about a half mile northwest of Frenchman—thence north along the ridge to join the reserve at the intersection of the Millwood and Kickapoo roads. A patrol of four men, also from the support, is to be sent to follow down the left bank of Salt creek and gain the hill one half mile east of the Taylor house. It will join the reserve north of the Taylor house. As these patrols have a considerable distance to march across country, they are started at once without waiting for the march of the column to be resumed.

During the halt, all the patrols which were out when Frenchman was reached (except the mounted patrol sent via Sheridan's drive) have rejoined their respective subdivisions. They report nothing of importance. The patrol sent to Sentinel hill had moved across country to the top of the hill and—in order to obtain the best view—had moved to the northern edge of the hilltop. From there it was able to see the town of Kickapoo and overlook the entire intervening country and the roads which traversed it. Shortly after the patrol reached the top, the point of the advance guard crossed the bridge over Salt creek. Nothing of importance having been discovered, the patrol began its descent towards the bridge as directed. It observed almost immediately that the column had halted, but continued its progress and reached the bridge just as the march was resumed. The patrol would have better fulfilled its duty had

it not complied so strictly with the letter of its instructions. Upon seeing that the column had halted it might better have returned to the top of Sentinel hill and continued in observation until the march was resumed. The patrol sent along the railroad track had about two miles to march to reach Frenchman. It could move expeditiously along the railroad track and the trestles offered ready means of crossing the creeks. It was considerably delayed, however, in reconnoitering the wooded ridge southwest of the railroad and did not reach Frenchman in time to secure much rest.

After a halt of fifteen minutes, a signal to resume the advance is received from the rear. The patrols sent out for observation during the halt are signalled to return, and the advance guard moves forward. As the point is crossing the rise about 700 yards north of Frenchman, it is fired upon—apparently from the direction of the Taylor house. The point falls back behind the rise and Lieutenant C deploys the advance party in rear of the crest. Any attempt to advance is met by a vigorous fusillade.

The number of rifles firing is uncertain; even the direction from which the shots come is doubtful. Lieutenant C is undecided what course to pursue. At this moment Captain B rides up and orders Lieutenant C to advance to the shelter of the watercourse in his front, while he himself moves the rest of the support westward under cover of the ridge and marches toward the high ground west of the Burns house.

Just what to do when the enemy is encountered is always a problem to be solved anew each time. One of the principal things is to ascertain promptly the position and strength of the enemy. The march of the column must not be delayed unnecessarily.

If two or three men, by employing magazine fire at long range, cause the whole advance guard to halt and await a tardy reconnaissance by slow moving infantry patrols, the column will be unnecessarily delayed. Hence, if it is reasonably certain that the opposing force is small, the advance must be continued. It is true that mistakes may occur and the enemy be encountered in such force as to cause the advance troops to be severely handled; however, some chances must be taken in order to accomplish results, for otherwise a mobile patrol could repeatedly and indefinitely delay a large column.

When the point is fired upon and forced to halt, a simple method of quickly developing the strength and position of the enemy, is to send a patrol of about one squad to each flank. If the opposing force is strong these patrols will soon come in contact with the enemy's deployed line; if it is only a hostile patrol that is impeding the advance, it will be forced to retire or else lay itself liable to being surrounded and captured.

In the present situation it is not necessary to send out such patrols, as the two patrols sent out from the support while at Frenchman will accomplish the same results. Captain B believes that the force opposing him consists of but a few men and does not consider it necessary to consult Major A before acting. As support is constantly approaching, Captain B can afford to act with boldness and decides to push forward and clear up the situation. In all advance guard work, questions of this character will frequently arise and must be decided by the officer on the spot, promptly and upon his own responsibility.

The advance party, deployed as skirmishers, crosses the crest at a run and gains the shelter of the watercourse. A number of scattered shots are fired at them but no harm is done. The commander

of the support continues to the west in column of squads under shelter of the ridge, throwing out a few scouts to the front and on the flanks. While this is being done, Major A gallops up and Captain B explains the situation. Major A sends word to the reserve to move up promptly.

In the meantime, the flanking group sent from Frenchman to cover the left flank reaches the high ground southwest of the Taylor house and opens fire from the hill. A half dozen Red soldiers are seen by this group to leave the shelter of the house and a few moments later to gallop up the road toward Kickapoo. Word is sent to the support commander and the patrol continues the advance.

The patrol sent from Frenchman along Salt creek reaches the hill east of the Taylor house just as the advance party emerges from the brush along the water course, and signals Lieutenant C that all is clear in its front. The advance party then moves up the hill to the Dolman and Taylor houses and finds them abandoned. Upon seeing the support approach, Lieutenant C sends the point forward along the main road and assembles the advance party. The latter then follows the point, sending three men to reconnoiter the orchard at Taylor. Communication is now established with the left flanking group.

On learning of the flight of the hostile patrol, the support commander immediately recalls his scouts, turns into the main road and resumes the march. He sends the following report to Major A, who in turn forwards it to the detachment commander:

Support, Kickapoo road, near Burns house,
21 Sept. 08. 8-10 A.M. No. 1.
Advance Guard Commander,
Kickapoo road.

The enemy encountered was a small cavalry

patrol. It has just retired from the vicinity of TAYLOR house toward KICKAPOO. The march has been resumed.

B,
Capt.

As the advance party crosses the draw north of the Taylor house, Captain B directs Lieutenant C to send a patrol of five men northeastward via hill 880 to hill 875.5 (north of the Millwood road); this patrol will reconnoiter from these points and afterwards will join the reserve near Plum creek.

When the advance party reaches the Millwood road, Major A rides up to the support and directs Captain B to send a section as a left flanking detachment along the parallel road leading to Kickapoo and about half a mile west of the route of the main column. Major A discusses with Captain B the strength of the Plum creek position and informs him that the detachment commander intends to press forward to Kickapoo without again halting. Captain B details a section under Lieutenant E to move via the road indicated by Major A. He directs him to keep in touch with the advance guard by means of a patrol moving along the intervening ridge south of Plum creek and along the watercourse north of Plum creek. He is to move rapidly until his party is abreast of the support, which he will rejoin in Kickapoo. Lieutenants C and D are informed of this flanking detachment.

The mounted patrol sent via Sheridan's drive reaches the cross-roads east of the Taylor schoolhouse just as the advance party passes that place. It reports having seen no signs of the enemy other than the hostile patrol which the advance guard encountered near Taylor. It also reports the Millwood road

bridge over Salt creek as destroyed. This has caused the patrol to be delayed. An inhabitant, whom it met after crossing, stated that several Red cavalry men had destroyed the bridge the previous afternoon and had then withdrawn toward Kickapoo.¹ A small patrol which Lieutenant C had detailed to reconnoiter the Taylor schoolhouse joins the support as it passes the cross-roads east of that place. The two flanking groups which were sent out from Frenchman also join the reserve at this point. Their march has been entirely across country, and consequently has been very fatiguing. North of the Millwood road it will not be necessary for Lieutenant C to send out a patrol to cover the left flank, for this section is open and Lieutenant E's connecting patrol will cover the country between the route of Lieutenant E's detachment and that of the main column. When the advance party reaches the little watercourse about 400 yards north of the Millwood road, Lieutenant C sends a patrol to reconnoiter the J. Aaron farm. It will join the support near Plum creek.

As the point crosses the crest of the hill overlooking Plum creek, a few shots are fired at it at very long range, apparently from the heights about 1000 yards north of the creek. Lieutenant C sends small patrols to the right and left to reconnoiter above and below the bridge some 300 yards, then to cross the creek and join the reserve. A patrol of six men is sent east along the ridge to hill 862 with instructions to move north from there about half a mile to a road, and, turning west on that road, join the reserve at 47.

The point continues to advance. Lieutenant C moves up the hill and with his glasses carefully reconnoiters the country to the front. Here he is

¹ Major A might well have used the mounted patrol sent via Sheridan's drive as a mounted point, after it had rejoined the advance guard as stated.

joined by Captain B. Three or four Red horsemen are seen, on the hill beyond 47, galloping toward Kickapoo. Captain B directs Lieutenant C to march the advance party across the bridge and, as a precaution, to deploy it on both sides of the road and move rapidly up the hill. He then sends the following report to Major A, who in turn forwards it to the detachment commander:

Support, Hill 200 yards south of Plum creek,
Kickapoo road.

21 Sept. 08. 8-40 A. M. No. 2.

Advance Guard Commander,
Kickapoo road.

Three or four Red troopers fired on the point at this place from hill north of 48 and then galloped off toward KICKAPOO. I will continue to advance.

B,
Capt.

On reaching the Plum creek bridge, the point examines it and, finding it in good condition, promptly crosses, followed by the advance party which deploys as directed.

Meanwhile the advance guard commander gallops up and joins Captain B on the hill. Captain B is directed to press the advance without delay. With the support in column he therefore follows the advance party at a somewhat increased distance.

When Lieutenant C passes 47 he receives word from Captain B to send a patrol to the right over hill 897.6 to Plum hill, thence down the draw to the railroad and northward along the latter to Kickapoo, where it will join the reserve. Eight men are sent. In the meantime the various patrols sent out between the Millwood road and Plum creek have all joined as directed and their return has been reported to Captain B. They have discovered nothing of importance.

The connecting patrol sent out by the left flanking detachment has enabled communication between it and the advance guard to be maintained fairly well.

No resistance having been met with, the advance party is assembled on reaching the crest of the hill north of 47, and the march is continued with the point pushed well to the front. A patrol is sent to the left to reconnoiter the orchard and the road 27-29, with orders to join at 29. The ravine and woods on the right, south of the Whartney house, are examined. At 45 Lieutenant C sends a patrol to reconnoiter the trail to the right and Kickapoo hill.

The support and reserve halt when the former reaches the crest of the hill just south of 45. The advance party moves to the first cross-street on the edge of the village, reconnoitering the vicinity and questioning the inhabitants. A patrol is sent along the ridge just east of the village to the cross-street about 300 yards distant, where it is to turn west and rejoin at 39. The point proceeds along the street 29—33; at 33 it signals to the advance party that all seems well, and then turns north. Lieutenant C then signals to the support and follows the point, which moves via 39 and 41 to 43. Here Lieutenant C, in response to a signal from the rear, halts the advance party. He reconnoiters the houses, sends a patrol north to hill 1000 and another southwest to hill 929 to remain in observation, and moves the point 200 yards west of 43 for the same purpose. The patrol sent around the east and north of the village joined the advance party as it passed 39.

In the meantime the support enters the village. Captain B at once sends a patrol under an officer to seize the railway station and telegraph office with all papers, and to stop communication over the lines. The patrol sent to Plum hill and thence north along the railroad might well have been given the same

orders, so that—should it reach the station first—it will not neglect to perform this important duty and thereby prevent important information from being concealed. There is no postoffice in the village. The storekeeper is seized, as he is probably one of the principal citizens. The support itself does not halt but continues through the village. All the patrols have now joined, except the one sent to the railroad station and telegraph office. The left flanking detachment under Lieutenant E joins the support at 33. The reserve follows the support through the village, and Major A, in accordance with instructions from the detachment commander, establishes, with the advance guard, outposts on the line Missouri river—hill 1000—hill 929—Plum creek.

AN ADVANCE GUARD*--INFANTRY AND CAVALRY Situation:

A Blue division, in Missouri, has been ordered to concentrate at Fort Leavenworth, Kansas, with a view to operating against a Red division reported to be approaching the Missouri river along the line of the Union Pacific railroad.

On August 20, 1908, the 1st Brigade (1st, 2d and 3d Infantry, with the 1st Platoon, Troop A, 7th Cavalry, attached) reaches Fort Leavenworth and camps in the vicinity of South Merritt hill, the outposts being provided from the 3d Infantry.

The remainder of the division is still east of the Missouri river, but is expected to reach Fort Leavenworth tomorrow.

The country is friendly to the Blues. The A.T. & S.F. and U.P. railroads have been rendered unserviceable.

At 8:30 p.m., Aug. 20, Major A, 1st Infantry, receives the following order:

<p>Field Orders No. 6.</p> <p>TROOPS</p> <p>(a) Advance Guard: Major A. 1st Bn. & 8 mtd orderlies, 1st Inf. 1st Plat. Tr. A, 7th Cavalry:</p>	<p>Hq. 1st Brigade, 1st Div., Fort Leavenworth, Kans., 20 Aug. 08, 8 P.M.</p> <p>1. Two regiments of hostile infantry are reported to have occupied VALLEY FALLS¹ late this afternoon, en route for EASTON. Small hostile cavalry patrols were seen two miles east of VALLEY FALLS at 6 P.M. today.</p> <p>The remainder of our division is expected to reach FORT LEAVENWORTH tomorrow.</p>
---	---

* Large map of Fort Leavenworth and Vicinity, 3 in.=1 mile.

1 Valley Falls is eighteen miles west of Easton.

Major A congratulates himself that the brigade commander has seen fit to attach all the cavalry to the advance guard. The advance guard is ordered to clear D at 5:15 a.m. If the support and reserve consist of two companies each (which seems to be a suitable division) and if a distance of about 500 yards between these elements is regarded as sufficient, the support will have to clear D about 5:07 or 5:08 a.m. (Road space of reserve=100 yards; distance between support and reserve=500 yards; total 600 yards or 7½ minutes' marching.)

The hostile infantry at Valley Falls is definitely reported—in Colonel X's order—to consist of two regiments. Major A, in the absence of other information, must accept this report as correct; he therefore considers that the two forces are about equal in infantry. Equally definite information of the strength of the hostile cavalry is lacking, but Major A believes that the Red cavalry, in all probability, is little, if at all, superior to his own. Both of these assumptions are borne out by the fact that the only hostile cavalry reported consisted of small patrols and these only two miles in front of the infantry; and Major A knows that the advance of a large command is usually covered by a proportionately large force of cavalry pushed out far to the front.

Major A next considers the enemy's probable intentions. The most reasonable assumption seems to be that the force in his immediate front has been thrown forward to seize the crossings of the Big Stranger for the passage of the Red division. The enemy is reported to have occupied Valley Falls the 20th (today); this report, considered in connection with the time of day, season of the year and position of the Red cavalry patrols, would seem to indicate that the enemy intended to camp at Valley Falls

for the night. As that town is eighteen miles west of Easton, while the latter place is but about eleven miles from Fort Leavenworth, Major A sees that the Blue brigade should reach Easton before the hostile infantry arrives there. It is, however, quite possible that the enemy's cavalry will be encountered before the Blue brigade reaches Easton.

Major A therefore comes to the following decision: To place two companies in the reserve and two companies in the support (F.S.R., ¶98); the platoon of Troop A, as advance cavalry, to furnish the necessary patrols on the line of advance and on the roads along the flanks; the patrolling of the cavalry to be so regulated as to cover as many approaches to the Big Stranger as possible.

Having come to the above decision, Major A, at 10 p. m., assembles his company commanders, Lieutenant D (commanding the cavalry platoon) and the battalion staff officers, and issues the following verbal order:

“Two regiments of hostile infantry, en route to Easton, are reported to have occupied Valley Falls (twenty-nine miles west of Fort Leavenworth) late this afternoon. Small hostile cavalry patrols were seen two miles west of Valley Falls at 6 p. m. today.

“Our brigade (less the 3d Infantry, which will remain here to cover the crossing of our division) will march tomorrow to Easton to hold the crossings of the Big Stranger.

“This battalion, with the 1st platoon, Troop A, 7th Cavalry, will form the advance guard under my command.

“The 1st Platoon of Troop A, under Lieutenant D, will form the advance cavalry. Patrols will be sent via Lowmont to reconnoiter the crossings of the Big Stranger near Millwood, via Mount Olivet to

reconnoiter the crossings near 114, and via road 100—96—90—88. The cavalry not on patrol duty will precede the infantry point at about one-half mile.

“Captain B will command the support, consisting of Companies A and B and four mounted orderlies. The support will clear D at 5:07 a. m. and march via the E—G—Atchison pike—74—78—80—Q—R—Easton road.

“The reserve—Companies C and D—will follow the support at 500 yards.

“The baggage will join the brigade train at D at 6:15 a. m.

“I shall be with the reserve.”

Although as a general rule the support commander is directly responsible for the conduct of the reconnaissance in the vicinity of the line of march, nevertheless, in the present instance the burden of this duty will fall upon Lieutenant D and his cavalry. The support commander is, however, always responsible that the proper road is taken, that repairs to bridges, etc., are made without unnecessary delay, and that information concerning the enemy or affecting the march is promptly transmitted to the advance guard commander. Captain B therefore studies his map from the above point of view. He first follows out on the map the route prescribed for the next day's march. The road appears to be an easy one to follow and presents no especially dangerous features. He then considers the adjacent roads and the general topography of the country.

Salt creek, the largest of the streams to be crossed east of the Big Stranger, needs scarcely to be considered by a command of this size, while the other creeks are probably entirely dry at this season of the year. The map does not show any defiles of importance, nor are there any other features that might cause delay. It is true that the line of march—be-

tween 74 and the vicinity of P—follows up the valley of one of the tributaries of Salt creek and is generally commanded by higher ground on either flank. The cavalry, however, on the nearby roads will give early warning of any hostile force in the vicinity.

Captain B notes the generally open nature of the country; especially in the vicinity of the line of march. He sees that from Sentinel hill an extended view of the country to the west may be obtained, while from the road P-Q-R the valley of the Big Stranger may be overlooked. In addition to the favorable nature of the country, the enemy is distant and the advance cavalry may be relied upon to give timely warning in case he is encountered. Captain B, therefore, sees that there will probably be little or no occasion for sending out infantry patrols until the vicinity of the Big Stranger is reached. (F.S.R., ¶102.) He decides to detail a half company as advance party and to follow at about 200 yards with the rest of the support.

Lieutenant D is specifically directed to reconnoiter the crossings of the Big Stranger near Millwood and at 114; the patrols for this reconnaissance will cover respectively the main road I—Lowemont—Millwood and the shortest road from the northern outskirts of Leavenworth to 114. The patrol ordered to proceed via 100—96—90—88 can be sent via 14—Southwest hill—Zimmerman road—30 to 100. The route of this patrol will thereby—as far as 30—be on high ground overlooking the line of march of the main body and affording an extended view of the country. Lieutenant D sees that at 78 a small patrol should be detailed to cover the road 78—84—R. The one platoon of cavalry will be barely sufficient to furnish the patrols mentioned and a strong cavalry point on the main line of advance.

At 5:15 a. m., August 21st, the bridge (less the

3d Infantry) is distributed as follows: A cavalry patrol of five men, under an experienced sergeant, is near 62. It has been started by Lieutenant D a little ahead of time with orders to move via the Atchison Cross—60—46—48—108—128—122—114—road to the Big Stranger. It is to reconnoiter the crossing at 114 and remain in observation until further orders. If any information is obtained during the march, it is to be communicated at once to the advance guard on the main line of march. When the patrol reaches 112 a trooper is to be sent with a report to Lieutenant D at P, and a similar report is to be sent to Easton when the patrol has reconnoitered the crossing near 114. A cavalry patrol of 3 men under a corporal is now ascending Southwest hill. This patrol was also started ahead of time and was ordered to march to 88 via the road 14—Southwest hill—Zimmerman road—100—96—90. When it reaches 90 it is to communicate with Lieutenant D near P. Another report will be sent to T upon the patrol's arrival at 88.

Lieutenant D with his platoon, preceded at 200 yards by a point of 4 men, is near G. He has started two troopers for Sentinel hill to observe the country to the west and rejoin the platoon near Frenchman.

The infantry point of four men, under a sergeant, is opposite the Schmidt house about 500 yards east of G. Lieutenant C, with the advance party, is at F; Captain B, with the support, follows about 200 yards in rear; while the reserve, under Major A, has just cleared D, about 500 yards in rear of the support. Connecting files are distributed so as to maintain connection between the various subdivisions of the advance guard. The 1st Infantry (less the 1st Bn.) is already in column of route on the road 8—D and is waiting for the advance guard to gain its distance; the 2d Infantry is now marching up to fall in at the rear of the 1st Infantry.

When the support approaches Sentinel hill, Captain B rides forward to the hill. Here he is joined by Major A. The two men sent to the hill by Lieutenant D report to them that they have seen no signs of the enemy and then ride down the hill to rejoin Lieutenant D. The two officers observe the country to the west and, after discussing the situation, ride down and join their respective commands.

As Lieutenant D approaches I, he selects five troopers under an experienced non-commissioned officer and sends them via the K—M—N—Lowemont—Millwood road to the Big Stranger. They are to reconnoiter the crossing at 89 and west of Millwood, and remain in observation until further orders, reporting at once any information of the enemy. When the patrol reaches Lowemont, a trooper is to be sent with a report to Lieutenant D near P. A report will also be sent to Easton after the patrol has reconnoitered the crossings near Millwood.*

Soon after Lieutenant D has sent out the patrol toward Millwood, he receives from the rear a signal to halt. Lieutenant D halts near I and directs his cavalry point to move forward to 74 to observe the 74—100 and 74—76 roads. Captain B rides up to the advance party and notifies Lieutenant C that the main body has halted at Frenchman for a 15 minutes' rest. Lieutenant C sends this information forward to Lieutenant D. Lieutenant D, upon the receipt of this information, sends a patrol of 3 men to move via 100 to 96; this patrol will remain on the high ground near 96 until the march is resumed and is then to join Lieutenant D at 76. The advance party and infantry point remain in position on the road. An infantry patrol is sent by Lieutenant C to the high ground just north of the advance party to remain in observation until the march is resumed when it is to rejoin. No further precautions or changes in the

position of the advance guard are considered necessary.

Shortly thereafter, the signal to advance is received and the march is resumed. At 76 Lieutenant D is joined by the patrol sent from I to 96. The leader reports that the patrol en route to 88 was met on the road 100—96 and had moved on from 96 after but a few moments' delay; he also reports that neither patrol has discovered any signs of the enemy.

When the cavalry point passes 78, Lieutenant D sends a flank patrol of three men via the 82—84—R road to rejoin him at R. When the patrol reaches 84 it is to communicate with him at P, and then continue its advance toward R.

After the advance party has passed P, a signal to halt is received from the rear. The 2 cavalry patrols sent via Lowemont and Mount Olivet are respectively moving westward from the places mentioned, each having started off a messenger to P as directed by Lieutenant D. The 2 cavalry patrols sent via 90 and 84 are respectively moving westward from the points named. Lieutenant D and his cavalry (less the men absent on patrol duty) halt at the bend in the road at Q. The infantry point—closely supported by the advance party—is halted at the house about 300 yards west of P. The support (less 1 squad sent to take post just southeast of P at the highest point of the hill) is moving forward to occupy the high ground at P. The reserve (which halted at once) is about 800 yards east of P. The main body of the brigade is halted about 700 yards in rear of the reserve.

Just as the support reaches P, messengers arrive from the patrols which were sent via 84 and 90. They report to Captain B that they have neither seen nor heard anything of the enemy, and are then directed to report to Lieutenant D at Q. Captain B

then rides over to the infantry squad on the hilltop and scans with his glasses the country to the west. Here he is joined by Major A. A few minutes later a trooper rides in from Lowmont and another from Mount Olivet. They report that the roads have been found to be clear, that none of the inhabitants questioned have seen any signs of the enemy, and that their patrols have continued their advance to Millwood and 114 respectively. A report to this effect is sent by Major A to the brigade commander. Lieutenant C is also given this information by the two troopers as they ride forward toward Q to report to Lieutenant D.

After a ten minutes' halt the march is resumed. Soon afterwards Major A receives an order from Colonel X to cross the Big Stranger, march the advance guard through Easton, gain the heights just west of the town, and halt.

The cavalry patrol on the 84—R road joins Lieutenant D at R. Lieutenant C, upon reaching R, sends an infantry patrol of five men along the ridge on the north to the railroad bridge over the Big Stranger, with instructions to cross the bridge and halt in observation on the hill north of Easton until further orders.

At T, a messenger from the patrol sent to 88 reports to Lieutenant D that the patrol has found no signs of the enemy. The messenger also brings a written message to the same effect forwarded from the patrol sent to 114. Lieutenant D tells the messenger to report back to his patrol and gives him a note to his patrol leader, directing him to move his patrol to 86 and thence southward a half mile or so to a good point of observation. Lieutenant D then directs the messenger who reported to him at P (from the patrol sent to 114) to rejoin his patrol at 114. Lieutenant D also gives him a note addressed to his

patrol leader, directing him to reconnoiter a mile or so westward from 114 and to send a couple of men toward 182 to see if they can learn anything of the enemy in that direction. Both messengers then start off, riding together as far as 88.

A messenger from the patrol sent to Millwood reports to Lieutenant D, upon the latter's arrival at Easton, that his patrol has neither seen nor heard anything of the enemy and is now watching the crossings at 89 and Millwood. Lieutenant D writes a message to the patrol leader, directing reconnaissance westward for a mile or so from the Big Stranger and, handing it to the messenger, directs him to report to his patrol leader.

Lieutenant D questions the postmaster at Easton, the telegraph and telephone operators, railroad officials and other citizens. From the best information obtainable it appears that the hostile infantry, at 7 a. m., was still at Valley Falls; that four Red troopers under an officer were seen 6 miles west of Easton (on the Easton—Valley Falls road) at 8:00 that morning—according to a telephone message from a farmer living on that road; that telephonic communication between this farmer's house and Easton was interrupted soon afterwards and has not yet been reestablished. Lieutenant D promptly transmits this information to Major A, who at once informs the brigade commander.

The advance guard marches through Easton and halts on the heights as directed. The infantry point moves to a position from which it can observe the Valley Falls road. Patrols are sent out from the advance party and support to occupy high points from which they can observe the country to the front and flanks. Lieutenant D, with his remaining 10 men, is directed by Major A to move westward toward Valley Falls to the first main cross-road west of the posi-

tion of the infantry point. He is directed to recall his patrol from the vicinity of 86 where—the infantry having come up and occupied the nearby high ground—it is no longer needed. Major A soon afterwards sends orders to Lieutenant D to send a patrol of 6 or 7 men a mile or two farther west on the Easton—Valley Falls road to drive back any small hostile patrols that may be in the vicinity. Major A then sends to the brigade commander a brief report and rough sketch showing the disposition of the advance guard, and awaits further orders.

A REAR GUARD*--INFANTRY

Situation:

A Blue brigade is in camp south of Leavenworth. A Red brigade, which is moving southward from St. Joseph, Mo., is reported to have arrived in the vicinity of Atchison, Kas. (fourteen miles north of Leavenworth).

The 1st Battalion, 18th Infantry (Blue), under Major A, which has been sent out from the camp of the Blue brigade to reconnoiter in the direction of Atchison, is falling back along the Kickapoo—Frenchman road before a superior force of the enemy. After a hard day's march, with several rear guard actions, the battalion, at about 6 p. m., September 21, 1908, goes into camp in the vicinity of the J. Aaron house, about 300 yards south of the Plum creek bridge on the Kickapoo—Frenchman road, with Company A (Captain B, commanding) on outpost.¹ The bridge was rendered impassable for wagons after the battalion had crossed the creek.

Reports received by Major A up to 9 p. m. indicate that the pursuing force, which consists of about two battalions of infantry, has gone into camp in the neighborhood of Kickapoo, with an outpost on the ridge about 700 yards south of the village. At this hour, Major A gives the following verbal order to his assembled officers:

“The enemy has reached Kickapoo and has gone into camp for the night, with an outpost on the ridge about 700 yards south of the village.

*Map of Fort Leavenworth, Kansas, and Vicinity, 4 in.=1 mile.

¹ In this problem, Plum creek will be considered unfordable below the bridge, but fordable in most places above the bridge.

"This battalion will continue the retreat tomorrow toward Leavenworth.

"Companies B, C and D will form the main body and will march at 6 a. m. by the Kickapoo—Frenchmam—Atchison Cross road.

"Company A will act as the rear guard and will hold the enemy north of Plum creek until the main body is under way, thereafter following at a distance of 700 yards. Privates C and D (mounted orderlies) will report to Captain B at 5:45 a. m., relieving the orderlies now on duty with the outpost.

"The regimental train, escorted by a squad of Company B, will march by the main road, at 5:30 a. m., to Broadway and Metropolitan avenues, where it will await further orders.

"I shall be with the main body."

It will be observed that the troops on outpost the night 21-22 September are to constitute the rear guard the following day. This is a good rule to observe whenever practicable. By such an arrangement, all of the difficulties incidental to the rear guard relieving the outpost at the beginning of a march are obviated. The officers and men of the outpost are familiar with the location and actions of the enemy, and with the general arrangements for temporary defense. When closely pursued by an energetic enemy, it is generally necessary for the outpost to hold its position, or for the rear guard to take up a defensive position, in case it relieves the outpost, in order to delay the advance of the enemy until the column is under way. Furthermore, unless the outpost troops are relieved before the march of the main body begins, they will have to make a forced march in order to overtake the column. If the outpost be relieved by the rear guard in time to allow the former to join the column before the march

begins, the rear guard must temporarily perform outpost duty. When the outpost troops constitute the rear guard for the following day, they can pass from the duties of outpost to those of rear guard without confusion or difficulty.

When the work of the outpost troops has been especially arduous during the night, it may be necessary to replace them with fresh troops in order to ensure good service during the march the following day. In such a case, it is generally advisable to relieve the outpost just before daybreak. (F.S.R., ¶175.) This gives a strong force on the outpost line at the time when the enemy is most likely to attack.

It will be observed that the rear guard is to consist of one-fourth of the battalion—a somewhat greater proportion than is usual in so small a command. The strength of the rear guard in a retrograde movement for a force of this size need not ordinarily exceed one-sixth of the whole force, and, in some cases, may be less. (F.S.R., ¶114.) It is generally advisable, however, to use a tactical unit, unless such a unit makes the rear guard entirely too large or too small. (F.S.R., ¶94.) In this case, the pursuing force is considerably larger than the retreating force, so the rear guard should be strong in order to protect the retreat of the main body. As the outpost company is to form the rear guard the next morning under the same commander, the latter can equalize the work performed by his command by assigning the most arduous work of the rear guard to those elements that have had the easiest work on outpost, and vice versa.

As the orders for the retreat are issued at 9 p. m., Captain B has plenty of time to think over the situation, and to decide upon his plans for tomorrow.

Reports indicate that the enemy is twice as strong as Major A's command; moreover, he is mak-

ing an aggressive movement, doubtless for the purpose of overtaking and defeating Major A's battalion before it can reach reinforcements. Captain B therefore expects the enemy's advance guard to be proportionately strong, and to be closely supported by his main body. (F.S.R., ¶97.)

Owing to the proximity of the enemy's camp, the first thing that will occur to Captain B is the probability of his having to fight a delaying action in order to check the advance of the enemy until Major A can get his column on the road and out of range of the enemy's advance troops. The camp of the battalion is protected by ridge 870. The movement of the column will also be covered by this ridge until the enemy has gained the high ground south of Plum creek. The rear guard must hold the ridge 870 sufficiently long to prevent its occupation by the enemy before the Blue main body has crossed the Millwood road—for the ridge (870) is within view and range of Major A's line of march as far as the road mentioned. Inasmuch as the Millwood road is within effective range of Taylor's, the enemy must be kept north of that road until the column has passed Taylor's. Hostile troops occupying the crest of the ridge at Taylor's could effectively fire upon the main body if the latter had not previously crossed the ridge 600 yards north of Frenchman's—and might possibly inflict some injury even if the main body had reached the vicinity of Frenchman's. The main body should therefore endeavor to cross Salt creek and turn eastward on the Atchison pike before the enemy reaches the Taylor house. After passing over Atchison hill the column will be nearing its reinforcements, and the enemy will probably discontinue the pursuit.

Owing to the line of march being over country roads, where marching in column of fours is slower and more difficult than in column of twos, Captain B

figures that the latter formation will be adopted by the main body. (F.S.R., ¶219.) This will double the length of the column, but, as the force is small, the increased rate of march will soon compensate for the increased length of the column. As the wagon train is well in advance, the road space occupied by the main body will be about 300 yards—about $3\frac{1}{2}$ minutes march. Therefore, if the leading company of the main body moves out promptly at 6 a.m., the company at the tail of the column should be in motion by 6:04 a.m.

The distance from camp to the Millwood road is about 700 yards, from the Millwood road to the Taylor house about the same distance, and from the Taylor house to Frenchman about one mile. The tail of the column should cross the Millwood road at about 6:12, pass the Taylor house at about 6:20, and Frenchman at about 6:40 a. m.

Captain B will now figure when the enemy may be expected to make his appearance on the line of Plum creek. The main body of the pursuing force is in camp in the vicinity of Kickapoo, with outposts about 700 yards nearer. The enemy is likely to advance about sunrise, which at this season of the year is about 6:00 a. m. While Captain B figures this as the probable time of the enemy's advance, he will not fail to be on the alert before daybreak. It should be remembered that the enemy is pursuing, and that he is likely to make an early start in the hope of catching the retreating troops before they leave their camp.

If the enemy should start at 6 a. m. he would, if unmolested, arrive at Plum creek at about 6:12 a. m. He would scarcely reach the ridge 870, north of J. Aaron's, until about 6:14 a. m. (2 minutes after Major A's column has crossed the Millwood road), nor would he arrive at the Millwood road before 6:22

a. m., (2 minutes after the column has crossed over the ridge at Taylor's). He would, however, if still unmolested, arrive at the Taylor house at about 6:31 a. m. (9 minutes before the tail of the column is likely to cross Salt creek).

Captain B, therefore, realizes that he must cause the enemy a delay of at least 9 minutes during the latter's advance toward Taylor's. 9 minutes added to the 11 minutes' start which the column would naturally have (on the assumption that the enemy does not move till 6 a. m.) would give the head of the column a lead of 20 minutes—or a distance of nearly a mile from its pursuers. Even this distance is favorable to the enemy, for any accident which checks the march of the retreating force may give the pursuers an opportunity to force a general action. Captain B therefore resolves to cause the enemy still greater delay if possible. The position on the south side of Plum creek is quite strong and Captain B expects to hold the enemy north of that stream until the required time is gained. He resolves to hold if possible the outpost position until about 6:15 a. m. He must, however, figure on the safe escape of his rear guard. If he permits his troops to become seriously engaged or the enemy to approach too close, the withdrawal may become exceedingly difficult. In a situation of this kind the rear guard commander must use good judgment. He must know how long to stay and when to withdraw. "The rear guard must not be tempted by the great natural strength of a position to occupy it at the expense of being separated at too great a distance from the main body, nor to hold it so long as to become compromised in a regular engagement." (S. & I., p. 169.)

Should Captain B find it necessary to withdraw from his first position before sufficient time has been gained, he can take up a second position on the high

ground along the Millwood road, and a third position on the high ground in the vicinity of the Taylor house. In any case, it is likely that the latter named positions will have to be occupied with a few men as the rear guard withdraws.

The enemy will have to advance over comparatively open ground for nearly 1000 yards. The rear guard, from concealed positions along the bluff on the south side of the creek, can bring a strong fire to bear on the enemy's advancing troops, thus making their movements very slow. The enemy will also be uncertain as to the size of the force blocking his advance; he cannot be sure that the entire battalion is not occupying the position. He will therefore, in all probability, deploy at least a part of his main body. By the time this is done, Major A's battalion will have gained its distance; Captain B can then withdraw.

The enemy will also be somewhat delayed in his passage of Plum creek on account of the fact that a considerable section of the flooring was removed by the battalion in its retreat. The bridge is of iron, and Major A had no explosives with which to destroy it, even if he had desired to do so. A retreating force should always take advantage of every opportunity to delay the enemy, except that large and important bridges, etc., should be destroyed by subordinate commanders only under orders from higher authority. Blowing up, burning, or removing planking from, bridges; obstructing fords, destroying supplies, etc., will frequently cause the enemy more delay and inconvenience than the actual resistance offered. (F.S.R., ¶123.)

Captain B will now consider the probabilities of the enemy's advancing over roads other than those used by the retreating force. There is a good road leading south from Kickapoo to the Millwood road,

parallel to the Kickapoo—Frenchman road and one-half mile west thereof. By taking this route the enemy could move to the south bank of Plum creek, but would then become exposed to effective fire from the ridge near hill 880, 600 yards west of the J. Aaron house. This would force him to fight faced to a flank or to make a detour to the west. In either case sufficient time would be gained to allow the main body to get out of the way. This route, therefore, offers no particular advantages and has the disadvantage of being somewhat longer than the main road. The enemy is more likely to send part of his force over the Millwood road, thence by the Sharp-McGuire trail, or more probably, by Sheridan's drive, for the purpose of cutting in on the flank of the column as it is passing over Atchison hill. Such a movement, if made unobserved and sufficiently early, would cause the retreating force considerable trouble. It would, however, necessitate so great a detour that there is little real cause for apprehension on the part of Captain B. It is possible, of course, for the enemy to make a night march—or to advance very early in the morning—by way of the M.P.R.R. bridge at the mouth of Salt Creek. Nevertheless, the fact that such a movement would involve a great detour—coupled with the fact that the hostile infantry has had even harder marching than Major A's battalion—causes Captain B to regard such a movement as extremely unlikely. On the whole, the probabilities are strongly in favor of the hostile advance being via the shortest line—i.e., along the Kickapoo-Frenchman road.

Captain B at this time will not attempt to figure out the details of his tactical dispositions for defense, for he does not know what the enemy is going to do. Unforeseen contingencies may arise to interfere with the carrying out of any prearranged plan. All that

he can do at present is to familiarize himself with the map of the country, figure the time necessary for the main body to move out, the probable length of time he will have to hold the enemy, consider the roads over which the enemy may advance, decide upon the general formation of his rear guard, and form his general plan of action. His troops must be on the alert so as to give early information of the movements of the enemy. With these precautions he will be prepared to meet any conditions that may arise.

The commander of the main body may be relied upon to have the planking of the Salt creek bridge loosened so as to be easily removed by the rear guard, in case the pursuit of the enemy be so energetic as to make such action advisable. In addition, points suitable for rear guard actions may be selected by the commander of the main body and hasty intrenchments constructed for the use of the rear guard. "The rear guard has an advantage over the pursuing force in not being obliged to reconnoiter the ground over which it has to march. All necessary information as to the roads is furnished from the front, and a well qualified staff officer with the main body should select defensive positions for the rear guard, and furnish its commander with a description (and, if possible, a topographical sketch) of the same." (S. & I., p. 169.) On the other hand, the commander of the pursuing force must reconnoiter the country over which he is advancing, and must take such other precautionary measures as appear to be necessary in order to remove as far as possible the danger of being caught in a trap. The advance guard commander is never certain just where he will find the main body of the retreating force blocking his advance.

Captain B will next consider the formation of his

rear guard. He observes that the outpost dispositions are such as to make it very easy to take up the rear guard formation. The detached posts, cossack posts, sentinels and patrols will have had the hardest work during the night and should be given the lightest work the following day. This can be arranged without difficulty. In fact it is probable that it will be the most convenient manner to taking up the rear guard formation. The support of the outpost, by occupying the main defensive line on the crest of the ridge overlooking Plum creek valley, can cover the withdrawal of the advanced troops and allow them to unite on the road and form the support of the rear guard, while the support of the outpost can follow as the rear party. On account of the small size of the force detailed for rear guard duty, Captain B decides not to have a reserve. (F. S. R., ¶101.) After deducting the patrols, if the company be divided into reserve, support, rear party and rear point, no one subdivision will be strong enough to offer any determined resistance. The reasons for having all the subdivisions in a large rear guard do not apply to a small one. Only a moment is required to deploy, and with proper reconnaissance the intentions of the pursuing force can be determined long enough in advance to enable the support to select and occupy a position.

Captain B therefore decides to detail the 1st Platoon (which has furnished the detached posts, cossack posts, sentinels and patrols for the outpost) as the support, and further to strengthen it with the 3d Section. The 4th Section (which, with the 3d Section, forms the outpost support) will form the rear party. Captain B intends to detail from the 3d Section all the patrols that may have to be sent out from the support—and thereby leave the 1st Platoon at full strength. Connecting files will be used be-

tween the rear party and support and between the support and the main body. In some places it may be necessary to have a double set of connecting files between the support and main body; on the other hand, it may be possible, during a considerable part of the march, to dispense with them altogether between the support and rear party. The number can be increased or decreased from time to time as may be necessary. Each connecting file must be able, at all times, to see and communicate with the bodies or connecting files both to the front and rear. Certain men at the head and rear of each subdivision will be specially designated to keep the nearest connecting file in view, and instructed to report promptly to the subdivision commander any information received. One or two men in each subdivision will be designated to maintain communication with each flanking group.

Each subdivision of the rear guard will send out such flankers as are necessary to reconnoiter the country properly. Captain B can decide at this time only the number of flanking groups to be used on first starting out. By studying the map he can determine in a general way where other flankers will be needed, but he will decide the exact time of sending them out as the march proceeds. It is useless to send out flanking groups with instructions to maintain a certain distance from the main body. The topography of the country is seldom such as to make this use of flankers consistent with proper observation and reconnaissance. There is nothing to be gained by using flankers when they can see no more than can be seen from the body from which they are sent out. If the country on both flanks of the column be so open and level as to afford a complete view for a distance as great as it is practicable to send out flankers, none should be used. On the other hand, if there be

any hill, ridge, ravine, wood or other topographical feature that might afford concealment for the enemy or a more extended view of the country, a patrol should be sent to such point or points for the purpose of observation and reconnaissance, and with instructions to join the column when its work has been completed.

Marching across country, climbing fences, wading through corn-fields, jumping ditches, etc., is very fatiguing work, while the rate of march possible off the roads is almost invariably less than that possible on the roads—and necessarily decreases in proportion as the difficulties of the terrain increase. It is therefore almost impossible for flanking groups to maintain their positions when marching through rough or close country. Instead of attempting to have the same groups perform the flanking duties for a day's march, better results will generally be obtained by sending out from time to time such flankers as may be necessary, with instructions to join the column when they have reconnoitered certain points or have been out a certain length of time.

On first starting out in the morning, the rear party will follow the support at a distance of about 400 yards, with the rear point, one squad, 100 to 150 yards behind the rear party. A flanking group of a noncommissioned officer and three men will be sent from the support with instructions to proceed to hill 880, 600 yards west of the J. Aaron house, thence southward via 19 and hill 900 (northwest of Moss) to join the rear party at Moss. A small flanking group will be sent out from 17 southwestward along the high ground to the vicinity of the A. T. & S. F. railroad, thence southeasterly to rejoin the rear guard at Frenchman. Sheridan's drive and the Sharp—McGuire trail are too far distant to be covered by infantry patrols, while to send a detachment sufficiently

large to resist a hostile advance via either of these routes would involve too great a dispersion of the rear guard company. The two mounted orderlies with the rear guard are needed for purposes of communication and cannot be spared for reconnaissance duty. A small patrol will be sent southeast as far as hill 875.5, 700 yards northeast of 17, thence via hill 880 (southeast of 17) to join the rear party.

Captain B is now ready to consider his rear guard orders. He will first decide whether to issue the orders in the evening or to wait until the following morning. He realizes that, unless the contemplated movement must be kept secret, or unless time is lacking, it is generally advisable to issue march orders a few hours before their execution. This gives each subordinate an opportunity to think over his part of the work and to familiarize himself with the map of the country over which he is to operate. In large commands this procedure is generally necessary in order that all may receive the orders before the time when the movement is to begin. In this case, however, the command is small and may be attacked before the time designated for the battalion to break camp. Under the circumstances, therefore, Captain B decides not to issue his orders for the rear guard until the next morning. He, however, at once gives orders for his company wagon to report to the train by 5:30 a. m.

No change in the position of the enemy having developed during the night, Captain B, at 5:50 a. m., gives the following verbal orders to his lieutenants and to such non-commissioned officers as can be present without interfering with their outpost duties:

“The enemy is still in camp at Kickapoo. Our battalion will continue the retreat today and will start in ten minutes for Leavenworth by the main road to the south (indicating the road Kickapoo-

far as to endanger the escape of the rear guard nor so close as to subject the main body to effective fire from the enemy. In rear of the position, about 400 yards, is a ridge from which a part of the rear guard can cover the withdrawal of the troops from the first position, and protect them until they have crossed the bridge. Lieutenant W states that the trees bordering the stream near the Burns house will afford considerable concealment and protection for the rear guard troops while retiring. He also says that there is an excellent position, on the north edge of the orchard that lies east of the bridge at Frenchman, which can be used to check the enemy until the rear guard is reformed and the subdivisions have gained their distances.

In view of just such a contingency, Captain B has been considering the advantages and disadvantages of each successive position, so as to be prepared should conditions arise requiring defensive action on the part of the rear guard. With the information brought by Lieutenant W and his own previous consideration of the conditions, Captain B is prepared to issue his orders without a moment's hesitation. He realizes that, before many minutes have passed, not only the enemy's advance guard but also the head of his main body will have arrived on the field. He hopes, however, so to dispose and maneuver his company as to gain the required time without becoming seriously engaged. Captain B is fully alive to the fact that the duty of the rear guard is to insure the safe retreat of its main body, and is prepared to suffer such loss as may be necessary to accomplish this object.

Captain B therefore at once gives the following verbal orders to Lieutenant H, who is with the support and in command of the 1st Platoon:

"The enemy's advance guard is approaching the

Millwood road. Our main body will be delayed about 20 minutes by a break in the bridge at Frenchman's.

"The rear guard will hold the enemy north of yonder farm-house (indicating the Burns house) until 7 a. m.

"Assume command of the support and at once take up a position near the farm-house indicated.

"I shall order Lieutenant M to fall back from the Taylor house as the enemy advances.

"I shall rejoin the support in eight or ten minutes."

Captain B then gallops to the rear party and gives the following verbal orders to Lieutenant M:

"Our main body will be delayed about 20 minutes by a break in the bridge at Frenchman.

"The rear guard will hold the enemy north of yonder farm-house (indicating the Burns house) until 7 a. m.

"The support is at present taking a position near the farm-house indicated.

"Halt your rear party near that farm-house (indicating Taylor's) and delay the advance of the enemy. Fall back by the main road to Frenchman in time to avoid becoming seriously engaged.

"I shall be with the support."

At this time the rear point, consisting of one squad, is about 400 yards south of the Millwood road. The rear party, consisting of three squads, is opposite the Moss house and has just been joined by Corporal H's and Corporal L's patrols. The support is near the Dolman house. Sergeant K's patrol is on the high ground 800 yards west of the Moss house. The Red advance party is a few hundred yards north of the Millwood road, its approach having been signalled by the rear point before the latter left 17.

Lieutenant M, upon receipt of Captain B's order, sends word to the rear point to take position at the

Moss house, falling back, when compelled to do so, to the woods north of Burns. The rear party is halted at the Taylor house and deploys along the northern edge of the orchard. The rear party and rear point have scarcely taken up their positions when the Red advance party deploys on the high ground near 17 and opens fire—which is answered by the Blue rear party and rear point. A few minutes later the Red advance party is strongly reinforced; the Blue rear point then retires from the Moss house to the northern edge of the timber fringing the brook 700 yards to the south. The rear party soon afterward begins its withdrawal—which is hastened by the appearance of the enemy on hill 900, four hundred yards northwest of the Moss house. The enemy on this hill is apparently in considerable strength—at least several companies—and is advancing southward; at the same time the Red advance party moves southward from 17. The rear party then retires, taking advantage of the cover offered by the trees and ditches along the road, and is joined by the rear point at the bridge near Burns. Sergeant K's patrol on the left flank falls back as the Red skirmishers advance and assists with its fire in delaying the hostile advance.

Upon arriving at the bridge near Burns, Lieutenant M is directed by Captain B to occupy the hill 400 yards south of Burns and to cover, by fire from that point, the withdrawal of the support toward the bridge at Frenchman. Fortunately for Captain B, the enemy does not push forward with vigor, but advances slowly, evidently attempting to take advantage of all the favoring features of the ground in order to shield himself from the fire of the support.

When the hostile troops—now apparently a full battalion—reach the Taylor house and the clump of trees 400 yards west thereof, Captain B withdraws the

support from the vicinity of Burns. The train and main body have now crossed Salt creek. As Captain B passes Lieutenant M's position on the ridge south of Burns, he directs Lieutenant M to retire before there is any danger of becoming involved in an action. Captain B then proceeds with the support toward Frenchman. By the time he reaches the orchard just east of the creek, Lieutenant M's section is retiring from the ridge. Lieutenant M, by taking advantage of the cover offered by the nearby brush-fringed gullies, is able to move without loss to a point on Salt creek about 400 yards north of the Frenchman bridge. Here he fords the creek and moves up the northwest slope of Sentinel hill, keeping under cover of the woods. Captain B's command—especially Lieutenant M's section—is now considerably disorganized, but the enemy is equally so and, upon coming under the fire of the Blue support in position at the orchard southeast of Frenchman, does not press the pursuit beyond the stream that crosses the road north of Frenchman. The main body of the Blue battalion is by this time ascending Atchison hill and will soon pass out of view and range.

Captain B now moves on with the support—which Sergeant K's patrol has now joined. He sends ahead a patrol of four men with orders to proceed as far as Atchison hill and to remain in observation there until the support passes, when it is to join the rear party.

When the rear party reaches the top of Sentinel hill, it is met by an officer's patrol which Major A, while en route toward Frenchman, had sent ahead with orders to ascend the hill and remain in observation until the rear guard should have crossed Salt creek. Lieutenant M and the patrol leader discuss the situation; the patrol then moves out to rejoin the main body. When the support reaches the school-

house, the rear party begins to descend the southern slope of the hill so as to follow at about 500 yards. The enemy, at the time the rear point leaves Sentinel hill, is still north of Frenchman, apparently engaged in reorganizing his advance troops. A few Red scouts are seen near Frenchman.

Captain B receives this information in a message sent by Lieutenant M, and thereupon sends word to Major A that the enemy apparently has discontinued the pursuit. Captain B, a few minutes later, meets Major A at the top of the hill and is informed by the latter that he has detailed (from the main body) two officers' patrols to remain in observation of the enemy. The patrol sent by Captain B to Atchison hill joins the rear party as the latter crosses over Government hill. The rear guard continues its march, following the main body towards Leavenworth, and has no further contact with the enemy.

A REAR GUARD*--INFANTRY AND CAVALRY

Situation:

On the morning of May 1, 1908, a Blue detachment, consisting of the 1st Infantry and troop M, 1st Cavalry, under command of Colonel A, was sent from Leavenworth, Kansas, to seize the Platte river bridge¹ at Platte City, Mo., and hold it against a Red brigade, reported to be advancing against Leavenworth from the northeast. The detachment marched via the Terminal bridge and the 16-12-10-E-D road, with the 1st Battalion, under Major B, as advance guard and Troop M, under Captain M, as independent cavalry.

Troop M's advance was somewhat delayed by about a platoon of Red Cavalry. Upon reaching the vicinity of C, it discovered a battalion of Red infantry approaching B from the direction of Platte City while two other battalions were crossing the bridge at that place. The troop opened fire, from the wooded spur west of B, upon the nearest battalion, but was unable to prevent its advance.

At 10:15 a.m., Colonel A and Major B, who are riding up to join the support, reach the vicinity of Clark's. Here they receive a message from Captain M, stating that his troop (less Lt. N's platoon) had been forced to retire westward from the wooded spur west of B; that this spur, at 10:05 a.m., was in the hands of the enemy who apparently was preparing to continue his advance; that the battalion he

* Large map of Fort Leavenworth and Vicinity, 3 in.=1 mile.

¹ All the bridges over the Platte river south of Platte City were destroyed some months ago—as was also the Missouri river bridge at Fort Leavenworth. The country is hostile to the Blue forces.

had just engaged was followed by two other battalions; that he would make every effort to delay the enemy; that he had left Lieutenant N, with the 1st Platoon, near C to remain in observation and delay any advance along the B—C road. A few moments later Colonel A received a written message dated 10:07 a.m., from Lieutenant N, stating: "Our troop has been engaged with about one regiment of hostile infantry on spur west of B. Can see more infantry approaching along A—B road, head now at railroad crossing, tail extending across bridge. Will open fire if column marches on C."

At this time heavy firing opens in the direction of C. Colonel A rightly infers that he is confronted by an entire brigade—most of which is already west of the river. He sees that he is entirely too late to carry out his original orders and just a little too late to make it possible to attack the enemy with any hope of success. He decides to retreat. He therefore sends his adjutant to the main body and baggage wagons with orders for them to turn back at once and retreat by the same route by which they had advanced, and directs Major B to cover the retirement with his battalion and Captain M's troop.

Inasmuch as the line of retreat of the main body runs southward from E about two and one half miles while the present position of the enemy is a considerable distance east of E, it is apparent to Major B that the right flank of the retreating column is the one most likely to be seriously threatened. The road E—10—12 is paralleled on the east by the road D—52—50, only one mile distant. Connecting these two roads are the east and west roads D—E, 52—10, and 50—12. The enemy is very likely to use the road D—52—10 or the road D—50—12, if he wishes to delay the retreat or force a fight. Major B must

therefore send a flank guard from D southward as far as 52 and possibly as far as 50. Owing to the lack of sufficient cavalry, even more than to the fact that such a flank guard will at no time be over a mile distant from the line of march of the main body, this flank guard will have to be composed mainly of infantry. It should be strong and must have some cavalry attached to it for use in reconnaissance and in delaying the enemy—as well as to facilitate the withdrawal of the infantry from the delaying actions in which it may become engaged.

The only other road that parallels the line of march of the main body toward 16 is the road G—14. This road is not likely to be used by any of the hostile infantry, for it is longer than either of the other north and south roads and the use of it by the enemy would involve a very considerable detour. Hostile cavalry might be sent by this road if the detour involved were the only objection to it, but the peculiar location of the road—at the foot of an almost precipitous bluff, rising in some places 200 feet above the road—and the fact that, at this season of the year, the “flats” near the river are exceedingly difficult for horsemen off the road, will make the enemy hesitate to send his cavalry by a route so little suited for cavalry action. Red cavalry patrols may, however, be sent by this road. They may even be sent via the road G—H and thence toward Duck lake to observe or fire upon the retreating column as it moves toward Terminal bridge, but the country in the immediate neighborhood of Duck lake is so swampy as to be entirely impassable for cavalry off the roads—and the roads themselves are none too good. Major B, knowing the whereabouts of the enemy and the nature of the country traversed by the last routes considered, sees that a small cavalry patrol sent from his (Major B's) rear cavalry via E—G—14 will prob-

ably be all that is needed west of the bluffs---at least until the vicinity of Harding (1600 yards west of 10) is reached.

The section of country over which the retreat must be conducted is in general rolling and broken—and, therefore, very favorable for delaying actions. The highest ground in this area extends from the point of the bluffs near G southward to hill 1000, near Harding's; thence eastward toward 10, thence along the road 10—12 to the southward. From this main watershed, branch the minor ridges along the 10—52 and 12—50 roads, as well as the irregular ridge extending from the hill near Harding's northward via Ode's, Patton's, Miller's and the wooded spur now occupied by part of the Red infantry.

Major B is aware that along each of the roads D—E—10—12 and D—52—50 are to be found numerous positions well suited for more or less protracted delaying actions. Various streams and dry water-courses cross both roads nearly at right angles, while the roads in many places form natural defiles. Aside from the minor positions furnished by the crest of nearly every ridge that crosses or flanks either road—positions that may or may not be utilized—Major B sees that the high ground near Patton's and the ridge running northwest from the vicinity of Miller's (400 yards west of D) will, in all probability, have to be held by at least part of the rear guard until the main body has passed over the hill 300 yards east of E. As the retreat progresses, the high ground extending from near Harding's northward toward Ode's must not be neglected by the rear guard—and especially not by the rear cavalry. Major B recalls how that section of the road between 10 and 12 commands the ravines near Cecil's and knows that, if he has at the last to fight a considerable action in order to enable the main body to get well beyond rifle

range from the bluffs near 16, the rear guard will have to occupy the hill at Douling's and the spur running westward therefrom—and possibly the hill at Alexander's (east of 12) and the saddle-back hill south of 12.

The firing so plainly heard by Major B in the direction of C, a few moments after Lieutenant N's last message was received, indicates, when considered in conjunction with Lieutenant N's message, that a hostile column is advancing via the road B—C. It must now (10:15 a. m.) be within good range of Lieutenant N's platoon; the latter is too weak, however, to cause much delay to a determined advance. The westward flanking movement on the spur west of B also looks serious. It is, therefore, very evident to Major B that the situation is one demanding prompt action on his part. He realizes that the present is no time for him to be studying maps or to be making measurements of distances or computations of rates of march. To attempt to prepare written orders or to endeavor to assemble the various subordinate commanders to receive verbal orders would alike invite disaster. A quick, though accurate, decision by Major B, and verbal orders given in person or promptly delivered by reliable messengers are what the occasion demands. (Field Orders, p. 7.)

At this time (10:15 a. m.) Major B knows the location of the Blue troops to be approximately as follows: Captain M, with Troop M (less 1st Platoon), in vicinity of house 1150 yards north of D, holding hostile cavalry to the north and observing infantry on the wooded spur west of B. Lieutenant N, with the 1st Platoon, Troop M, in edge of woods 200 yards east of C. Captain B, with Companies A and B (support) and two mounted orderlies, in position on high ground about 300 yards north of Clark's, and firing

upon enemy on wooded spur. Captain D, with Companies C and D (reserve) and two mounted orderlies, awaiting orders at D. Main body 800 yards west of D. Baggage wagons halted at 10.¹

Major B, from his position on the high ground north of Clark's, can see that the first half mile of the road to be taken by his right flank guard (i. e., the road D—2) is more exposed than the road leading westward from D. The right flank guard should therefore start first and move out at once, in order to reach the woods near 2 before the hostile troops on the road B—C have passed C. Companies C and D (the reserve of the advance guard) are at the cross-roads at D and can most readily form the right flank guard; furthermore, being in close order, they will be able to move off without delay. The cavalry to accompany the right flank guard will naturally be Lieutenant N's platoon, which can readily withdraw toward 2 upon the near approach of the enemy. Companies A and B (the support of the advance guard) can form the reserve and support of the rear guard, and can fall back slowly from Clark's to the high ground near Miller's and Patton's. From here, with the co-operation of Captain M's cavalry, the hostile advance must be checked long enough to enable the main body to pass over the ridge just east of E.

The main body is unhampered with wagons or artillery—so Major B knows that, as soon as the regimental adjutant has reached the main body and delivered Colonel A's order, it can almost instantly change its march from a forward movement to a march to the rear. Major B, therefore, does not anticipate that the infantry of the covering troops

1. The wagons, during the early part of the march, had followed only a few hundred yards in rear of the main body. About 8:45 a. m., however, they were ordered by Colonel A to halt upon arrival at 10, and to remain there until further orders. (F. S. R., ¶257.)

will have to engage in any protracted delaying actions in order to enable the main body and train to reach Leavenworth in safety. He even hopes that, after withdrawing from the vicinity of D, all the work of delaying the enemy can be performed by the cavalry alone.

Major B of course carefully studied his map before leaving Leavenworth and, since that time, has had an excellent opportunity to observe at close range the country already made familiar to him through his map. During the progress of the march, in addition to observing the ground and comparing his map with it, he has made mental notes of the tactical advantages presented by the various physical features. (F.S.R., ¶105.) As advance guard commander, he naturally observed—or had previously considered—all points suitable for delaying actions. Ever since the first report of hostile contact reached the advance guard, Major B—even while urging his battalion to a faster pace—has been considering what measures he would take if the enemy were encountered in force or if the regiment had finally to retreat. Consequently, at the time he receives the order which makes him responsible for the safe withdrawal of the regiment, he is prepared to issue his orders at once. In fact, Colonel A has scarcely given Major B the orders for the retreat when the latter turns to his battalion adjutant, Lieutenant X, and says: “Take this man with you (indicating the messenger who brought Lieutenant N’s last message), ride rapidly to Lieutenant N and give him the following verbal order:

“The enemy is moving part of his force westward along the wooded spur west of B. Our regiment is retiring by the road on which it came out.

“The 1st Battalion and Troop M (which has been placed under my command) will form the rear guard.

“Companies A and B and Troop M (less Lieutenant N’s platoon) will follow the main body.

“Companies C and D and Lieutenant N’s platoon will form a right flank guard under Captain D. The infantry of the flank guard will at once march southward from D toward 52. Lieutenant N will delay the advance of the enemy toward C but will not risk severe losses nor allow his retreat to be endangered. He must keep in constant touch with Captain D and will at once send to him for further orders.

“I shall be with the support of the rear guard.”

Lieutenant X signifies that he understands the message and at once gallops off toward C, accompanied by Lieutenant N’s messenger.

Major B then turns to Captain B, who is standing near by, and says: “Hold your present position, Captain, until I return from D. I shall be back in a few moments”. He then gallops to D where he finds Captain D and gives him the following orders:

“The enemy is advancing westward along the spur 800 yards north of yonder company (indicating the company north of Clark’s). Another column is approaching along this road (indicating) from Platte City. Our regiment is retiring by the road on which it advanced this morning.

“The 1st Battalion and Troop M (which has been placed under my command) will form the rear guard.

“Companies A and B and Troop M (less Lieutenant N’s platoon) will follow the main body.

“Your two companies, with Lieutenant N’s platoon of cavalry, will form a right flank guard. You will march southward from here—provisionally to the roadfork $1\frac{1}{2}$ miles south—and will delay the advance of the enemy until the main body has passed 10. I have sent orders to Lieutenant N, who is about 1000 yards east of here, to delay the enemy’s ad-

vance along this road (indicating road D—C). I have also ordered him to report to you for further orders.

"I shall accompany the rear guard support. March off at once."

Major B then rides back to the position north of Clark's and says to Captain B:

"Have Company A fall back at once to the high ground 800 yards west of here. Hold your present position with Company B. I shall give you further orders in a few moments."

Major B then turns to his battalion quartermaster, Lieutenant Y, and to the messenger who brought Captain M's last report from the north, and says to Lieutenant Y: "Take this man (indicating the messenger) with you, find Captain M, and give him the following verbal order:

"The enemy is advancing in force from Platte City by the main road toward C. Our regiment is retiring by the same road on which it came out.

"The 1st Battalion and Troop M (which has been placed under my command) will form the rear guard.

"Companies A and B are now withdrawing from Clark's and will follow the main body as rear guard reserve and support.

"Companies C and D, with Lieutenant N's platoon, will form a right flank guard under Captain D and will march southward on that road, D—52 (indicating). I have directed Lieutenant N to report to Captain D for orders.

"Troop M (less Lieutenant N's platoon) will, as rear cavalry, follow companies A and B via D—E—10, delaying the enemy but avoiding serious losses.

"I shall be with the support".

Lieutenant Y, accompanied by the messenger, then takes the road and gallops off on his errand.

Captain B now reports for further orders. Major B does not have to include any information of the enemy or of the main body in his orders to him—for Captain B was present when the reports from the front were received and is familiar with the general situation—so Major B merely says:

“The 1st Battalion and Troop M will form the rear guard.

“Send orders to Captain A to deploy his company (A) on the high ground west of Miller’s to cover your withdrawal from here, and thereafter, as the reserve, to follow the main body at about 800 yards.

“You will withdraw from here as soon as Company A is in position to cover your withdrawal, after which, as the support, you will follow the reserve at 600 yards.

“Captain D, with companies C and D and Lieutenant N’s platoon of cavalry, will march southward along that road (indicating road D-52) as a right flank guard.

“Troop M (less Lieutenant N’s platoon) will follow the support as rear cavalry.

“I shall accompany the support.”

By this time it is about 10:22 a. m. The firing to the north is apparently coming nearer and is increasing in volume, but the firing in the direction of C seems to have considerably decreased.

At 10:30 a. m. the Blue troops are in the following approximate positions: Baggage wagons are just leaving 10, enroute to Leavenworth. The head of the main body is about 200 yards south of E. The reserve (Company A) left Clark’s at 10:20 and is now deployed on the high ground west of Miller’s. The support (Company B) is now withdrawing past Diehl’s house. Troop M (less the 1st Platoon) now occupies—with 2 dismounted platoons—the position

recently vacated by company B and is covering the withdrawal of the latter toward the present position of Company A; the remaining platoon (mounted) is on the left flank of the dismounted platoons, and in contact with the Red cavalry platoon. (F.S.R., ¶120.) The right flank guard (which left D at 10:18) is disposed as follows: Company D is marching southward on road D—52 about 200 yards south of 2. Company C is at 2, with one platoon deployed along north side of woods, waiting for company D to gain a distance of about 500 yards. 1st Platoon, Troop M, is at edge of woods near 4, with a few scouts still out in woods east of 6.

By this time both of Major B's staff officers have returned and are with him near the support of the rear guard. From information received from the rear cavalry, it is apparent that the leading troops of the hostile regiment on the spur west of B are just approaching the road D—15 at a point about 1000 yards north of D. Nearly all of the hostile cavalry is on the enemy's right. Lieutenant X has informed Major B that at 10:20 the nearest hostile troops on the road B—C were approaching the bridge 700 yards east of C.

Major B now believes it probable that the infantry of the right flank guard will not have to fire upon the enemy before taking up the march toward 52. Major B sees that Companies A and B will probably have occasion to fire a few rounds before leaving the vicinity of Miller's and Patton's, but he hopes that after that time Troop M alone will be sufficient to delay the enemy's pursuit. He congratulates himself upon the fact that the hostile cavalry is greatly outnumbered by his own. (F.S.R., ¶118.) Were the reverse the case, the situation would be very different.

About this time Colonel A rides up from the main body and joins Major B. The latter is at the time writing Colonel A a message which is to contain the latest information of the enemy, the disposition of the rear guard, etc., but upon seeing the Colonel approaching he verbally reports the situation. Colonel A expresses his approval of Major B's dispositions and informs him that he has given orders to Lieutenant Colonel C (now in command of the main body) to have a detail from the main body loosen a number of planks in the highway bridge¹ over the Rock Island R.R. cut 600 yards south of E. (F.S.R., ¶123.)

By 10:35 a. m. all of the rear guard infantry, except Company B (which has come up and deployed at the position just vacated by Company A west of Miller's, and is waiting for the latter company to gain its distance), have taken up the march along their respective routes.

Major B, a few minutes previous to this time, had sent the following message to the commander of the right flank guard:

Rear Guard, 1st Infantry, Diehl's, Mo.,
1 May 08, 10-33 A. M. No. 1.

Captain D,
Right Flank Guard,
Road D—52.

Main body can not pass 10 before about 11:00 A. M. You must hold 52 until that hour. Then send one company to join support of the rear guard at 10. March with remaining company via road 52—50—12.

B,
Major.

Captain D does not receive this order until 10:40 a.m., at which time Company D is ascending the

¹ This bridge actually exists but is not shown on this map.

ridge 700 yards north of 52. Captain D halts the company at the top of the ridge and begins to construct slight shelter trenches. Company C comes up about 10:46 and occupies the ridge. It reports that the enemy is still a considerable distance to the north and that the nearest hostile force—about two battalions—is advancing but slowly.

Captain D directs the commanding officer of Company C to follow Company D at 500 yards as far as 52 where Company C will remain till 11:00 a. m., at which time it will move westward and join the rear guard support near 10. He sends a message to Lieutenant N, notifying him that Company C is to march westward from 50, that Company D is to march via 52—50—12, and that his cavalry platoon must cover the march of both companies. Company D then moves off via the road 52—50—12. At 10:52 a.m. Company C leaves the ridge and marches toward 52, first sending a section to march across country by way of the woods southeast of Storm's.

At 11:00 a.m. the positions of the Blue troops are as follows: Baggage wagons are 500 yards east of 14. Head of main body is about 100 yards south of 10. The reserve (Company A) is 1200 yards north of 10. The support (Company B) is passing Ode's and the woods east of Ode's. Captain M's troop has just crossed the highway bridge (not shown on map) over the Rock Island railroad south of E, and is now throwing the loosened planks into the cut 60 feet below. A squad of cavalry under Lieutenant O has been left behind, at hill 300 yards east of E, with orders to fall back via G. (The leading troops of the enemy on the road D—E have only just reached Patton's, their progress toward that point having been greatly delayed by the Blue cavalry.)

On the right flank, Company D is 600 yards south of 52 and Company C is at 52. Lieutenant N's pla-

toon (which from its position in the woods on the line 2—4—E. Todd, had delayed the enemy's advance southward from the line C—D) has now occupied the partially completed trenches on the ridge 700 yards north of 52. (The leading troops of the enemy on this flank are now approaching the railroad.)

By 11:30 a.m. the regimental train is within 800 yards of Stilling's and the head of the main body has reached the road-fork 300 yards east of 14. Company A is near Douling's, while Companies B and C are within 200 yards of Cecil's. Company D is approaching Alexander's from the direction of 50. The cavalry now occupies the following positions: Captain M with two platoons on road E—10, 400 yards north of 10. 1 squad in flanking position on high ground 1300 yards northwest of 10. Lieutenant O's squad (less a corporal and 3 men on road G—14) is rejoining via Bluis. Lieutenant N's platoon (less a patrol in the woods east of Storm's and a sergeant and 6 men sent via road 52—50—12) is 500 yards west of 52. Troop M, with the exception of the small detachments on the extreme flanks, is in contact with the enemy's advance troops.

At this time Major B writes the following message:

Rear Guard, 1st Infantry, Douling's, Mo.,

1 May 08, 11-30 A.M. No. 2.

Captain D.,

On road 50—12.

Join the reserve with your Company at 12. Your duties as flank guard commander will then cease. Am sending word to Captain M that Lieutenant N's platoon is now subject to his orders.

B.
Major.

Major B hands this message to one of his mounted or r's and says: "Ride to the fork in the road

300 yards south of here (indicating direction), then turn to the left and you will meet Company D within a few hundred yards. Give this message to the company commander, Captain D." The orderly repeats this order and gallops off. (F.S.R., ¶31.)

Major B now sees that the last of the infantry should have passed 14 by about 11:57 a.m. He therefore writes the following message to Captain M:

Rear Guard, 1st Infantry, Douling's, Mo.,
1 May 08, 11-35 A.M. No. 1.

Captain M,

On road 10—E.

The last of our infantry should reach the flat at 14 by noon. You will prevent the enemy from occupying the heights near 12 before 12-15 P.M. and will then join the column. Lieutenant N's platoon is hereby placed under your command. Notify Lieutenant N.

B,
Major.

Major B sends this message by Lieutenant X who delivers it to Captain M a little before 11-45 a.m. and takes back the following reply:

Rear Cavalry, 10, Mo.,
1 May 08, 11-45 A.M. No. 1.

Major B,

On road 10—12—14.

Enemy's pursuit has ceased along road E—10—12. Lieutenant N reports that the Red infantry pursuing by road D—52 occupied 52 at 11:35 A.M. and is advancing westward. I have one platoon on hill 1000 near Harding's with orders to join me at 14 at 12:20 P.M., moving via trail on top of bluff. Will fall back with rest of troop from here as enemy approaches from 52 and the north. Nearest hostile infantry can not reach 12 before 12-15 P. M. even if progress is

not delayed at all. Can easily check hostile cavalry.

M,
Capt.

This message reaches Major B at 11:55 a.m. (just as the support reaches 14) and is forwarded by him to Colonel A. The enemy soon afterward discontinues the pursuit, and Colonel A's entire command is safely across the bridge a few minutes after 1:00 p.m.

ATTACK OVER OPEN GROUND BY INFANTRY*

Situation:

The 1st Division, Blue Army, operating in friendly country, is encamped at Atchison and has sent the 1st Battalion and Machine Gun Platoon, 1st Infantry, under Major A, to Fort Leavenworth, Kansas. Two medical officers, six hospital corps men and eight mounted orderlies are attached to the battalion. The train consists of seven baggage wagons, four small arms ammunition wagons and one ambulance.

Major A's command reaches Fort Leavenworth late in the afternoon of October 11, 1908.

About 4 a. m., October 12, Major A receives the following telegram:

Hq. 1st Div. Blue Army	Atchison, Kans.,
12 Oct. 08.	3 A.M. No. 1.
Commanding Officer,	
1st Bn. 1st Inf.,	
Fort Leavenworth, Kansas.	

Enemy reported marching from south to concentrate at KANSAS CITY; strength about fifteen thousand of all arms. Most of this force will reach KANSAS CITY at a late hour tonight. It is probable that a cavalry force of about two squadrons has been pushed forward toward BEVERLY.

It is very important that the railroad junction at BEVERLY be seized and held before the enemy can reach there in force. Move with your command to BEVERLY and strongly intrench to hold junction.

*Map of Beverly and Vicinity, 3 in.=1 mile.

The division will march for FORT LEAVENWORTH at 5 this morning.

By command of Major General X:

B,
Chief of Staff.

The railroad between Beverly and Kansas City and the one between Fort Leavenworth and Atchison are temporarily disabled and will not be available for several days.

Major A starts with his command at 6 a. m. for Beverly. At the eastern approach to the Missouri river bridge he leaves Lieutenant C in charge of a detachment consisting of two squads, Company A, and four mounted orderlies, with orders to provide for the immediate protection of the bridge and to construct trenches and prepare obstacles. He directs that the baggage wagons and the ambulance be left with this detachment until further orders.

The advance guard (Company A, less two squads) has reached a point 1000 yards northeast of H when a civilian is met who reports that a force of Red cavalry numbering about 100 men had arrived at Beverly about an hour before. This information is promptly transmitted to Major A.

Major A at once directs the senior company commander, Captain C, to take command of the main body and to hasten the march. He then gallops forward to the advance guard in order to gain a view of the country in front.

From personal reconnaissance from the woods near 14, from reports of patrols, and from conversation with a civilian who has just escaped from Beverly (and who corroborated the other civilian's story), Major A learns the following:

The woods on the north side of the R. I. R. R.

track have such dense undergrowth that the movement of troops through them would be very difficult. Beet creek, between the pond (south of 14) and a point east of the Burlington R. R., can be crossed only on the railroad bridge. The area bounded by the R. I. and Burlington railroads, Beet creek and the ravine east of 14, is practically level—having only slight undulations of surface—and is sown with winter wheat. The clump of timber southeast of 14 is open, but the ravine 200 yards northeast of this timber is dry and would afford good cover for a line of troops. The farm road leading eastward from 12 to the farm house would afford some cover to troops lying down.

The R. I. R. R. is bordered, for a space of fifteen or twenty feet on each side, by tall weeds and brush which would afford cover from view but no protection from fire. Both railroad tracks are raised from two to three feet.

Major A also learns that the enemy has constructed, in the southwest angle of the railroad junction, a hasty trench about fifty yards west of the Burlington tracks and extending southward, parallel to these tracks, for about 100 yards, then bending back at right angles to meet the tracks. A much smaller but similar work has been constructed in the northwest angle of the junction.

Major A's available troops consist of about 500 men and a machine gun platoon, while the enemy's force on the ground numbers only about 100 men and not all of these will be available for dismounted action.

Major A believes, however, that the Red troops at Beverly would not have been pushed so far forward unless supported by other troops nearer than Kansas City. He thinks it probable that the troops at Beverly made a night march in order to seize the

junction at daybreak, and that they will be reinforced during the day by other cavalry.

Major A believes that he will be able to drive away the Red force now at Beverly and that, if there is time available to strengthen the position, he can hold the place against the expected reinforcements. He realizes, however, that prompt action is necessary if he is to succeed—for hostile reinforcements may arrive very soon.

The division commander's telegraphic order evidently contemplated that Major A would reach Beverly before the enemy. Major A has failed to do this, but he believes that the spirit of the order calls on him to attack and seize Beverly, and he decides to do so at once.

He sends to the division commander a report of the conditions and of his intentions.

In forming his plan of attack, Major A has very little latitude. He must push his attack over the open ground between the R. I. R. R. and Beet creek. It might appear that the attacking force should advance through the woods north of the R. I. R. R. While this would afford cover to the advance for some distance, it is rejected for the reasons that this timber has a dense undergrowth which renders it practically a jungle, and progress through it would be slow, particularly if a few of the enemy's scouts are sent in there; and time is an important factor, for the action must be over before reinforcements for the enemy arrive. Besides, troops advancing thru this brush would be badly out of hand on reaching the edge of the timber, with about 700 yards still to cover and these 700 yards over ground as open and difficult as any on the south side of the woods.

To move his force south of Beet creek and turn the enemy's position from the south is open to the objections that it uncovers the Blue line of retreat,

would take more time, and would simply result in a frontal attack from another direction. Moreover, if the enemy's reinforcements should arrive before the completion of the movement, they might, owing to their great mobility, cut Major A entirely off from his line of retreat and ruin his command.

Such a division of his force, i. e., making the above turning movement with part—say two companies—and holding the rest for a direct movement along the R.I.R.R., would be inadmissible. It would cause too great dispersion for so small a force, it would place an impassable obstacle between the parts of the command, and the part detached for the turning movement would be in a hopeless position if reinforcements of any size should arrive for the enemy after the movement was well under way but before it had been successfully completed.

While such a division of force would often be most advantageous for cavalry acting against infantry—its greater mobility making it possible for it to reunite in spite of mishaps—it is inadmissible for infantry to scatter in this way when opposed to cavalry.

In advancing directly, as Major A decides to do, the least possible time is lost, his line of retreat is covered, and if necessary, he can break off the attack and withdraw to the bridge. This latter move is apt to be costly if the attack has progressed very far, but it can be done if Major A, during the movement, keeps his force well in hand.

It now remains for Major A so to arrange his attack as best to accomplish his object. He decides to place the machine gun platoon in the weeds and brush on the south side of the R.I.R.R., with two squads of Company A as a flank guard on the north side; to have Company A (less 4 squads) and Company B form the firing line, Company A to advance

along the R. I. R. R. and Company B to direct itself at first on the farm building and stacks east of 12 and then to make an enveloping attack on the enemy's left; Companies C and D to be in reserve.

Major A directs that each man be given 120 extra cartridges from the ammunition wagons, after which all empty ammunition wagons are to go back to the Missouri river bridge. Two mounted orderlies are sent to the south as a patrol. Major A then assembles his officers and, after giving them all the information he has of the enemy and of the 1st Division, Blue Army, issues verbally the following order:

"We will attack at once and I want the attack pushed home promptly.

"Lieutenant B, with the machine gun platoon, will move up under cover to 14 on the south side of R.I. railroad and, while taking great care to prevent being seen, will move forward toward Beverly until he finds a good position where he will establish his guns, leaving his pack animals under cover of the woods. He will not open fire until the infantry advance draws the enemy's fire; he will then, by his fire, assist the advance. Later, under cover of the infantry fire, he will advance his guns from their first position, being governed solely by circumstances and his best judgment.

"Company A will send a sergeant and two squads to report to Lieutenant B as escort. The escort at first had better take position on the north side of the track, being careful to keep out of sight of the enemy. It will also act as left flank guard.

"Company A (less 4 squads) and Company B will constitute the firing line, Company B forming the right of the line and being the base company. Company A on the left will leave an interval of 50

yards between its left and the railroad. These 2 companies will deploy under cover of yonder woods (indicating the clump of timber southeast of 14) and then will advance to the ravine 200 yards in front. The advance to the ravine can probably be made without halting to fire but, on reaching that point, a heavy fire for a short time will undoubtedly be advantageous, as it will have an effect on the enemy and will probably enable Lieutenant B to advance his machine guns.

"In advancing from the ravine, Company A will move directly on Beverly, Company B will first direct itself on the farmhouse and stacks 700 yards south of Beverly and then will envelop the enemy's left.

"Companies C and D will constitute the reserve and will occupy the eastern edge of the ravine as soon as companies A and B have moved forward from there to the attack.

"The senior medical officer will provide for caring for the wounded.

"I shall be with the reserve."

Companies A and B would deploy at about one yard interval and take up the advance.

Soon after leaving the cover of the woods they would be met by a fire from the enemy. Lieutenant B's machine guns would at once reply to this fire and the firing line would probably be able to gain the ravine without halting. Companies A and B would then open fire and, if practicable, Lieutenant B would advance his machine guns.

Company B would then take up the advance, moving in the general direction of the farm house and stacks. Company A would follow, moving straight to the front. At first the forward movement would be made by company, halts being made to fire when the enemy's fire became fairly effective,

the number of shots fired being limited to the number necessary to make an advance advisable. The advance by company, however, could be made only for a very short time, if at all. To keep the enemy's fire down and render it less effective, he must be subjected to a continuous fire; hence the company commanders would at first advance their right platoons under cover of the fire of the left platoon, and then bring the left platoon up abreast of the right under cover of the fire of the latter. But even this would soon become impracticable, and a heavier fire would be necessary to hold down that of the enemy sufficiently to permit the advance of a fraction of the line. Company commanders would then advance their right sections under cover of the fire of the other three, and then in turn bring the other sections forward to positions abreast of the first. In this manner the enemy will be subjected to the fire of $\frac{3}{4}$ of the line while $\frac{1}{4}$ only is trying to advance.

The fire should be heavy enough to materially reduce the volume and impair the efficiency of the enemy's fire—and thereby make it practicable for the firing line to advance. If necessary, the company commanders would reduce the fractions advancing at one time, to a squad, thus subjecting the enemy to the fire of nearly 11-12 of the line while the other 1-12 advances. Whatever the size of the fraction advancing, the advance must be continuous, the fractions following each other promptly. The length of each advance will be controlled by two factors: first, it must not be so long as to wind the men making it, thereby ruining their ability to promptly resume an effective fire; and, second, its length must be reduced in proportion to the effectiveness of the enemy's fire so as not to give him time to pick up the target and concentrate his fire upon it.

After the line is within effective infantry range

the advance should be made at a run. Advantage must be taken of any cover offered by the ground.

It is to be borne in mind that, in advancing to the attack over an open plain against an enemy under hasty cover, your chief reliance must be placed in the effectiveness of your fire to demoralize the enemy and destroy the effectiveness of his fire. You must be superior to him and must so regulate the size of the advancing fractions as not to afford him too good a target, and at the same time have rifles enough in action to interfere decidedly with your opponent's aim and fire.

Major A would move his two reserve companies into the ravine as soon as the firing line advanced therefrom and, if he found it advisable, would improve the cover.

The number of rifles in the Blue firing line is more than double the number in use by the enemy, and the fire of the Blue infantry is greatly augmented by Lieutenant B's machine guns. Major A will therefore expect the attack to be pushed home by the firing line alone. However, he would carefully observe the progress of the attack, holding Company C in readiness to reinforce the firing line. If the attack is seen to falter, Major A would at once throw in not less than a platoon of Company C, and more probably the entire company. If the line is reinforced, it must be done by enough men at one time to produce an appreciable moral effect on his own troops as well as to increase the volume of fire.

While Major A would not unnecessarily reinforce the firing line, on the other hand he would be careful not to hold back needed reinforcements and thereby permit the attack to come to a standstill.

When the firing line reaches the farm road running eastward from 12, the enemy's position would be practically enveloped; the firing line, deployed

along this road, would have considerable cover and, with its great superiority in numbers, it should not take long to obtain an overwhelming fire superiority and make easy the advance from this point. When the advance is resumed from the sunken farm road (12), Major A would probably start forward Company C and expect its arrival to carry the line forward to the enemy's position—if the other two companies did not anticipate it by gaining the position unaided. The enemy undoubtedly would not wait for the collision.

The position carried, the reserve (Company D) would at once move up and, passing beyond the position, cover the reforming of the companies that were in the attack.

An outpost would at once be formed and, under its cover, every effort would be made to prepare a position to cover the junction from attack by a larger force of the enemy.

Ammunition would be brought up and distributed. The wagons would be sent for as soon as the position was carried, all necessary rations, etc., would be unloaded from them, and they would then be sent back with the wounded to Fort Leavenworth. A report of the situation would be made to the division commander.

COMMENTS

In this case the enemy is definitely located, and his strength is known to Major A. Moreover, Red reinforcements may arrive before the end of the action—while Blue reinforcements cannot arrive until late in the day. These circumstances influence Major A in forming his dispositions for attack, and induce him to place in the firing line—at the very start—a large proportion of his men, and to keep the remainder (in one body) near at hand as a reserve.

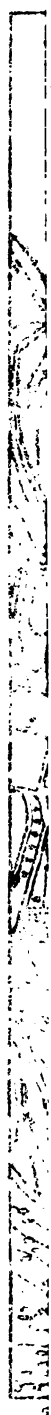
In many cases, the position and strength of the enemy could not have been so definitely determined before the attack. Frequently the situation is such that information as to the exact position and real strength of the enemy's main force can be obtained only by attacking.

If Major A's information of the enemy had been indefinite, he would have held a greater part of his force out of action until after the enemy's position had been developed and the proper direction determined. To change the direction of troops already actually engaged is exceedingly difficult. Therefore, when doubt exists as to the enemy's position and this doubt cannot be cleared up by patrols, the firing line at first should be made only strong enough to develop the enemy; then, and not until then, can the remainder of the force be given the proper objective and direction.

Could Major A have felt certain that the enemy would not be reinforced during the day, his plan of attack might have been different. He might then with perfect safety have divided his command—for he could so divide it that each fraction would be superior to the enemy. One point, however, that should always be borne in mind is that, in order to justify dividing a small force to such an extent that its chief can no longer control the whole, the advantage to be gained by such dispersion must indeed be very great. The smaller the force the less justifiable is undue dispersion.

Had time permitted the enemy at Beverly to have carefully prepared his position with a strong, practically closed work, with a loop-holed parapet, and possibly with wire entanglements in front, Major A would not have been justified in attacking as he did.





FORCING A DEFILE*

Situation:

On April 2, 1908, Fort Leavenworth is garrisoned by two companies of Red infantry and 6 mounted orderlies. A large quantity of arms and ammunition is in cars standing on the tracks at the Fort Leavenworth depot with no locomotives to move them away.

On the afternoon of April 2d, a brigade of Blue infantry arrives at Kansas City and the brigadier general commanding learns the above facts concerning the situation at Fort Leavenworth. He therefore orders Major X, with the 1st Battalion, 1st Infantry, to proceed to Leavenworth next morning, by rail, in order to seize or destroy the stores before they can be removed.

The battalion reaches Leavenworth at 8:30 a. m., April 3d., and detrains. At this time Major X is met by a spy who left the post about 7 a. m. This spy reports that locomotives will reach Fort Leavenworth by 11:30 a. m. to haul all cars north; that the Red commander, at 7 a. m., was apparently unaware of the proximity of Blue troops; that owing to recent rains Corral creek is unfordable throughout its length, and that the only bridge, a heavy masonry one, is at the Grant avenue crossing.

Major X pushes forward at once. At 9 a. m. the point of his advance guard arrives near Grant hill and sees a few Red soldiers apparently preparing to destroy the bridge. The point fires upon these men and drives them off before the bridge is injured, but is, in turn, fired upon by troops on Pope hill, who

* Map of Fort Leavenworth, Kansas, and Vicinity, 4 in.=1 mile.

seem to have a hasty trench near the southern edge of the woods.

Major X at once appreciates that if he is to accomplish his object he must force his way to the depot at Fort Leavenworth before 11:30 a. m.; it is now 9 a. m.

To reach the depot he has two courses open to him: one, to turn the unfordable Corral creek by going around by Atchison hill; the other, to force the passage of the bridge in the presence of the enemy.

The former course would necessitate a march of about 6 miles and, as the enemy has a few mounted men, Major X's withdrawal from the front would undoubtedly be watched and reported. The enemy would therefore have timely notice of the turning movement and would take up a suitable position to meet it. It would take about 2 hours (i. e., until 11 a. m.) to march via Atchison hill—even if the march were entirely unopposed; the enemy would then have to be attacked and defeated before the depot could be gained. If the enemy caused Major X a delay of only a little over half an hour, it would then be after 11:30 a. m., and Major X would be too late to capture the cars. He therefore rejects this plan.

The only other course, therefore, that is open to him is to cross the bridge, defeat or drive away the enemy's force, gain the depot, and destroy the stores before they can be removed.

In estimating the probabilities of success, he considers that he has practically twice as many men as his opponent; that is, 4 companies to 2: the enemy, however, is more or less intrenched in a position that commands, at a range of only 560 yards, the bridge that Major X must cross.

Once across the bridge the terrain is not unfavor-

able to Major X, and his troops can move over it independent of the roads.

In studying the ground on the south side of Corral creek, Major X sees that Grant hill affords a good position for troops within 700 yards of the enemy's trench, and that troops can be brought to Grant hill practically unexposed to fire from Pope hill. He further sees that troops moving down the west side of Grant avenue can approach the creek and the southern end of the bridge with very little exposure to hostile view or fire. It is also apparent that good cover can be obtained along the north side of the creek both above and below the bridge.

Major X believes that, if he places 2 companies on Grant hill to maintain a steady and heavy fire on the hostile troops, and moves the other 2 companies, under cover, to the southern end of the bridge, the latter companies can be crossed, if in suitable formation, without excessive loss; the enemy can be driven off, the remaining companies brought across, and his object attained.

Major X can direct the first two companies to seek cover in the creek bottom as soon as they have crossed the bridge. Whether they will be directed to seek cover above or below the bridge will depend upon Major X's plan of attack.

If these companies are directed to move downstream after crossing the bridge, they can move under cover to Rabbit point and from there make the main attack, enveloping the enemy's left; the frontal attack can then be made along Grant avenue by a third company.

The advantages of this plan are that the trees on Rabbit point will afford some cover to the troops making the main attack, while the direction of attack is such as to tend to drive the enemy away from the depot or at least to diminish his chances of taking

up a good position to cover the cars. If the enemy holds on to his position with much tenacity, he can scarcely prevent at least a part of Major X's force from reaching the depot before him.

If, on the other hand, the leading companies turn upstream after crossing the bridge, they will at once gain excellent cover and can follow up the ravine leading toward Merritt hill and make the main attack from that direction, the frontal attack being made as before.

If the defeat of the enemy, as indicated by driving him off Pope hill, were all that was desired, the advantage of the latter plan is marked; the main attack would gain commanding ground that would enable it to take the enemy's position in reverse. Under the circumstances, however, the disadvantages of this plan greatly outweigh its advantages. It disperses the command more than the other plan, keeps the enemy directly between Major X's force and the cars, tends to drive the enemy toward the cars instead of away from them, and drives him into the woods where he can considerably delay Major X's advance across the open.

It is of course possible to send one half of the battalion east and the other half west. This plan, however, is not deemed worthy of serious consideration, for it would disperse the battalion to an extent unwarranted in so small a force and would make it impossible for Major X to control the movement.

Major X therefore decides to send two companies across the bridge at once, with orders to turn east and gain the sheltering north bank of Corral creek; to cover this movement by the fire of the other two companies posted on Grant hill: when the first two companies have crossed and are ready to attack, to use one of the companies at Grant hill to make a frontal attack, the other company, as the re-

serve, to remain at Grant hill and assist in keeping down the hostile fire. The effort to be made is to push the enemy away from the depot and enable the Blue troops to reach there first. If the enemy quits his position and takes up a new position not at the depot, the three companies in the attack must hold or mask him in his new position, while the fourth pushes rapidly for the depot and destroys the stores.

The battalion has been marching on one of the city streets and Grant avenue. The advance guard consists of Company A. From Grant hill to the edge of the city is a little less than 700 yards, so that the head of the main body is just about leaving the city at the time the point opens fire from Grant hill.

Major X halts the main body and orders the advance guard company to move at once to a position on Grant hill. He then rides forward to make his personal reconnaissance. As soon as he has decided upon his plan of attack, he rides back to the main body, assembles his staff and his company commanders at the edge of town and gives the following verbal orders:

"Two companies of Red infantry are in position on Pope hill and have partially completed a hasty trench there. Locomotives to take away the cars of arms and ammunition are expected to reach Fort Leavenworth by 11:30 a. m. Corral creek is unfordable.

"We will cross Corral creek by the Grant avenue bridge and attack the enemy, enveloping his left flank and forcing him away from the depot. We will then destroy the loaded cars on the track.

"Company A's duty as advance guard is terminated.

"Companies A and B, under command of Captain G, will at once take up a position on Grant hill and

open a heavy fire on the enemy. They will cover the movement of the other two companies across the bridge.

"Companies C and D, under command of Captain H, will proceed under cover along the west side of Grant avenue to the southern end of the bridge. Having arrived there and the troops on Grant hill having opened fire on the enemy, Companies C and D will cross at a run in small groups or by file at considerable intervals, and will gain cover on the east side of the avenue. As soon as assembled on the north side of the creek, Captain H will move his command to the vicinity of Rabbit point and from there will attack the enemy, enveloping his left flank. Captain H will prevent the enemy from getting between his force and the depot.

"Company A will attack along Grant avenue as soon as Captain H has started his attack.

"Company B will remain on Grant hill, maintaining its fire on the enemy until he quits his position, when it will assemble and constitute the reserve.

"If the enemy quits his present position before Captain H can intervene between him and the depot, and takes up another position, in buildings or elsewhere not in the vicinity of the depot, Captain H will, with his command, cut him off from the cars, and I will send another company direct to the depot to destroy the arms and ammunition.

"If the enemy on quitting his present position proceeds direct to the immediate vicinity of the cars, Captain H's command, reinforced by Company A, must push him vigorously. Every endeavor will be made to prevent the enemy's making a stand.

"I shall be at Grant hill at first; then shall join the advance."

COMMENTS

The plan of attack will at first somewhat disperse the command, but, under the circumstances, this dispersion is believed to be justifiable.

Major X's orders and instructions are more detailed and provide for future contingencies more than is usual or often desirable. However, since Major X elects to remain at first with Companies A and B on Grant hill, it is essential that the commanders of the other companies—and especially Captain H—fully understand Major X's general plans and the manner in which he wishes them to be executed; otherwise, valuable opportunities might be lost while awaiting further orders from him. Major X would of course follow the movement closely and be ready to order any necessary changes. But with his plans thoroly understood by all his soldiers, very valuable time might be saved.

It is particularly important, in case the enemy quits his position, that he be prevented from taking up another position that will cover the cars. If, after leaving Pope hill, he halts where Captain H can interpose between him and the depot, so much the better. The crushing of the two hostile companies is not the primary object of Major X's movement, but the destruction of the stores. If these two companies can be held away, the stores can first be destroyed; then, if time permits, the enemy's troops can be given further attention.

On the other hand, if the enemy quits his position in time to get in advance of Captain H's command in the movement toward the cars, the more rapid and energetic the pursuit, the less resistance will the enemy be able to offer.

It is to be borne in mind that it is difficult to restore order among troops driven out of a defensive position—provided the pursuit be close and vigorous.

It is easier for the pursuing force to keep the defeated troops going than to start them again after they have been allowed a brief respite from molestation and have halted.

The chances are decidedly in favor of Major X's winning without undue loss. His two companies on Grant hill can subject the enemy to a heavy fire and the other companies should lose no good opportunity to add to it. The crossing of the bridge would probably not result in a heavy loss. The bridge is short and complete cover is afforded at each end. The well known tendency of troops to shoot at those shooting at them will keep a large part of the enemy's fire directed on Grant hill instead of on the bridge, and an effective fire, from a command equal in size and only 700 yards away, will very materially reduce the effectiveness of the enemy's fire.

DEFENSE OF A POSITION*

Situation:

A regiment of Blue infantry, which has been surprised and routed by an equal force of Red infantry, is retreating via Dakota street and the 56—24—38 road; it is followed by two battalions of the Red regiment. The retreat of the Blue regiment is being covered by its 1st Battalion under Major A.

At 11:30 a.m. the head of the 1st Battalion (Blue) has reached a point 400 yards west of 58. At this time Major A receives from his regimental commander the following message: "The Salt Creek bridge¹ one mile west of 38 has been destroyed. Salt creek is unfordable. It will be impossible to cross before 1 p.m., until which time you will prevent the enemy from gaining the ridge near 28. Impossible to reinforce you."

The Red advance troops are now marching westward on Dakota street but have not yet reached 20th street.

It is plain that Major A, in order to carry out the order just received, must take up a defensive position. In assuming an attitude of defense, a commander must consider whether it is possible for him to assume the defensive with the idea of ultimately changing to the offensive, or whether the situation limits him to a passive defense. In the present instance, the enemy is at least twice as strong as Major A, who must nevertheless delay him for one

* Map of Fort Leavenworth, Kansas, and Vicinity, 4 in.=1 mile.

1. This bridge is not shown on the 4" map but is shown at 100 on the large map of Fort Leavenworth, Kansas, and Vicinity, 3"=1 mile.

and one half hours; it is apparent, therefore, that Major A cannot risk an offensive action, but must confine himself to a purely passive defense.

In the pursuit of a defeated force, the pursuers must act with boldness and celerity if they hope to secure the full fruits of their victory; but boldness often leads to rashness, and it is then that the retreating troops, profiting by such over-confidence, may make a counter-stroke and turn the tide in their favor; however, such offensive returns can be made only in cases where the morale of the covering troops has not suffered too greatly by the events which caused the retreat.

In order to select a suitable position, Major A must first study the terrain. A hasty glance at his map will greatly assist him in this and will permit him quickly to make a tentative selection. He will then precede the command to the site selected and there make a careful study of the ground itself. The present position of his own force and that of the enemy hardly permit him to consider any position east of the 22—58—56 road. The first position west of the above road is that in the vicinity of 24. At this time a position farther to the west would hardly be considered, as the advantages offered by the ridge and by the defile leading from 58 to 24 would be lost: taking up such a position at present would also involve a considerable loss of time—a most important factor. Should the enemy turn the position at 24, it may later become necessary to fall back to a position in the vicinity of 40, but at present, a position near 24 is in every way more advantageous and is therefore selected by Major A.

In considering the terrain in the vicinity of the position selected, it is seen that from 24, ridges radiate to the north, south and east. The ridge to the north terminates in Eleven Hundred Foot hill, the one

to the south juts out into the valley of Three Mile creek, while the one to the east connects the two former with Southwest hill which is parallel to them and extends southward toward Three Mile creek. Two ravines are thus formed, one extending northward toward Salt creek, the other southward to Three Mile creek. The sides of both ravines are steep, but those of the south ravine become more gentle as the ravine widens. There is no timber in the south ravine, but in that to the north a few trees line the lower levels. There is a vineyard in the south ravine but it would afford no protection from fire and but little shelter from view. The three ridges above mentioned as radiating from 24—and which for reference will hereafter be called Eleven Hundred ridge, Haug ridge, and 22—24 ridge respectively—are clear and have an excellent command and view over the country to the north, south and east. Communication is good, while the line of retreat (the 24—38 road) leads straight to the rear. Troops on Haug ridge lining its eastern edge would be under cover from the fire of an enemy advancing up Three Mile creek and the ravine southeast of Haug. Against an advance from 22 these troops could find cover along the west slope of Haug ridge. Troops in the vicinity of 24 would have to construct intrenchments.

In the selection of a defensive position, the most important consideration is a clear field of fire, up to 1400 yards if possible; it will, however, rarely happen that a position can be found in which every part will offer this extreme range. In the position under consideration there is a clear field of fire eastward along the 22—24 ridge for over 600 yards, while firing could be opened at a range of 1500 yards should the enemy present a suitable target in the south ravine and valley of Three Mile creek. To the north of

the 22—24 ridge, the field of fire is more restricted, and the trees in the ravine bottom, as well as the numerous branches of the main ravine, would afford considerable cover for small groups of men.

Where the defense is passive and time an important element, obstacles which delay the enemy's advance are of great advantage, especially if they check him within effective range. In an advance against the position at 24, no natural obstacles would be encountered, for the ground is passable for infantry at all points, although the attack up the steep slopes would be exhausting to troops and would cause some delay; on the other hand, the numerous folds in the ground would afford cover and would assist the attack. Lack of time makes it impossible for Major A to construct any artificial obstacles, as abattis or barb wire entanglements.

The position is not too large for the force which is to occupy it. Haug ridge can be lightly held, due to its commanding position and excellent field of fire. The bulk of the force will not have to occupy a greater front than 400 yards, which is not excessive, under the circumstances, for a battalion acting alone. A small force on the defensive may safely hold a proportionately greater front than a large force, for in a small force all parts of the line will be able to concentrate their fire on the same point of the enemy.

The position is such that the enemy will have to attack it, for it could only be turned by a long, circuitous route (the 68—50—42 road). Such a wide turning movement is hardly to be expected of a pursuing force composed entirely of infantry.

With a small force the flanks are generally the weak points; in the position under discussion, the right flank is very strong and it could be enveloped only by an advance up the valley of Three Mile creek—

practically a defile in this vicinity. The left flank constitutes the weak point in the position, for an approach up the north ravine would be largely covered by trees and by the small branches of the main ravine.

Having considered the terrain and its relation to the defense, Major A must view the situation from the standpoint of the Red commander before making his own preliminary dispositions, for his own dispositions must largely depend upon the course the enemy will probably pursue.

Several courses are open to the Red commander: first, a wide turning movement via the 68—50—42 road; second, an envelopment of the right flank via Three Mile creek; third, an envelopment of the left flank via the north ravine.

The first plan need not be feared for reasons stated above. It would require a march of three miles and could easily be seen in time to meet it. Were the pursuing force composed of cavalry, this would undoubtedly be the proper course and should have good chances of success in cutting off Major A; for infantry, however, it would hardly seem the best move, for time is an important element in a pursuit and that method should be followed which offers the speediest results.

The second plan, due to the contracted nature of the country and the clear field of fire from Haug ridge, would have little chance of success.

The third plan, for reasons before mentioned, would seem to offer the best chances for success. In this case the secondary attack would probably be made along the 22—24 ridge while the main attack moved into the north ravine and advanced up its western branch against Major A's left flank.

The strong and weak points of the position, as well as the course that the enemy is most likely to

pursue, having been considered, Major A must now determine upon the manner in which he will occupy the position. As all movements of the defense are dependent upon those of the attacking force, the former lacks initiative, and this indeed constitutes the great weakness of the defense. A defensive position should be lightly held until the plan of the attacker is definitely known, in order that any move on his part may be quickly met by a counter-move on the part of the defense; this necessitates a large reserve. The defender, especially in a passive defense, must endeavor to bring the attacking force under a heavy fire at long range. This consideration is opposed to the preceding one and makes it difficult for the defender to determine the proper time to throw in his reserve.

The right flank being the strong flank, one company should be able to hold Haug ridge. This company would be deployed along the eastern edge of the ridge, facing east, its right opposite the Haug house. One section would be sent to occupy the southeastern end of the ridge. A company in this position would command any approach via Three Mile creek and, by a flank fire, any advance along the southern side of the 22—24 ridge.

Another company, also facing east, should be deployed across the 22—24 road, about 150 yards east of 24. Here it would command any advance along the 22—24 ridge and could bring to bear a flank fire on any advance up Three Mile creek. The field of fire down the north ravine would be screened to some extent by the conformation of the ground and by the trees in the bottom of the ravine, but no force could enter the ravine without coming under fire at long range. This company, upon arriving at its position would immediately send a patrol of one squad to the stone quarry east of 22, where a good view of the

country to the east might be had and the plan of the attacker learned at the earliest possible moment. When forced to retire, the patrol would take position under cover on Eleven Hundred Foot hill to report any movements of the enemy in that direction.

Both companies on the line would begin to entrench upon arriving at their positions. The ranges to prominent points would also be determined.

Upon taking up a defensive position, the troops should be given as large a supply of ammunition as possible, for the only hope of the defense is to make up for its inferiority in numbers by a heavy fire; and to do this a plentiful supply of ammunition is necessary. The battalion ammunition wagon¹ would therefore distribute its ammuniton along the position, leaving part with the reserve; it would then proceed to the main body to be refilled, after which it would return to the battalion and take up a position under cover at 26.

The left flank being the weak point of the position, the reserve (the two remaining companies of the battalion) is placed behind it, under cover and about 100 yards north of 24. From here it can quickly extend the line to the north, if the enemy makes his main attack up the north ravine; or can as quickly reinforce the right flank if circumstances render it necessary. In the present situation it would seem better to keep the force well in hand and, when once the enemy has revealed his plan of attack, to meet his move with the heaviest fire possible, deploying if necessary all of the reserve except one platoon—which would be held back to serve as a rallying point in case of necessity.

When the head of the column reaches 24, Major

¹ The baggage wagons, in such a situation as this, would be with the main body; the battalion ammunition wagons, however, always remain with their respective battalions.

A (who had ridden ahead upon receiving the message of the Blue commander) halts the battalion and directs the company commanders—except Captain D who, with his company, is covering the march of the battalion—to report to him. To carry out the above described dispositions Major A then issues the following verbal order:

“The enemy’s troops are still east of 20th street. Our main body is halted at the Salt creek bridge one half mile west of 38.

“The battalion will immediately take up a defensive position along the ridge north and south of here to delay the enemy until 1:00 p.m.

“Captain A, deploy your company facing east across the 22—24 road about 150 yards in front of this point. Send a patrol to the rock quarry on yonder hill (indicating Southwest hill) to gain contact with the enemy and report his movements promptly; when forced to retire, the patrol will take position under cover on Eleven Hundred hill and will report any movement of the enemy against the left flank.

“Captain C (the head of whose company is opposite the road leading up to Haug’s), move your company to Haug’s and deploy it facing east with the right at Haug’s. Detach one section under an officer to occupy the southeastern end of the ridge.

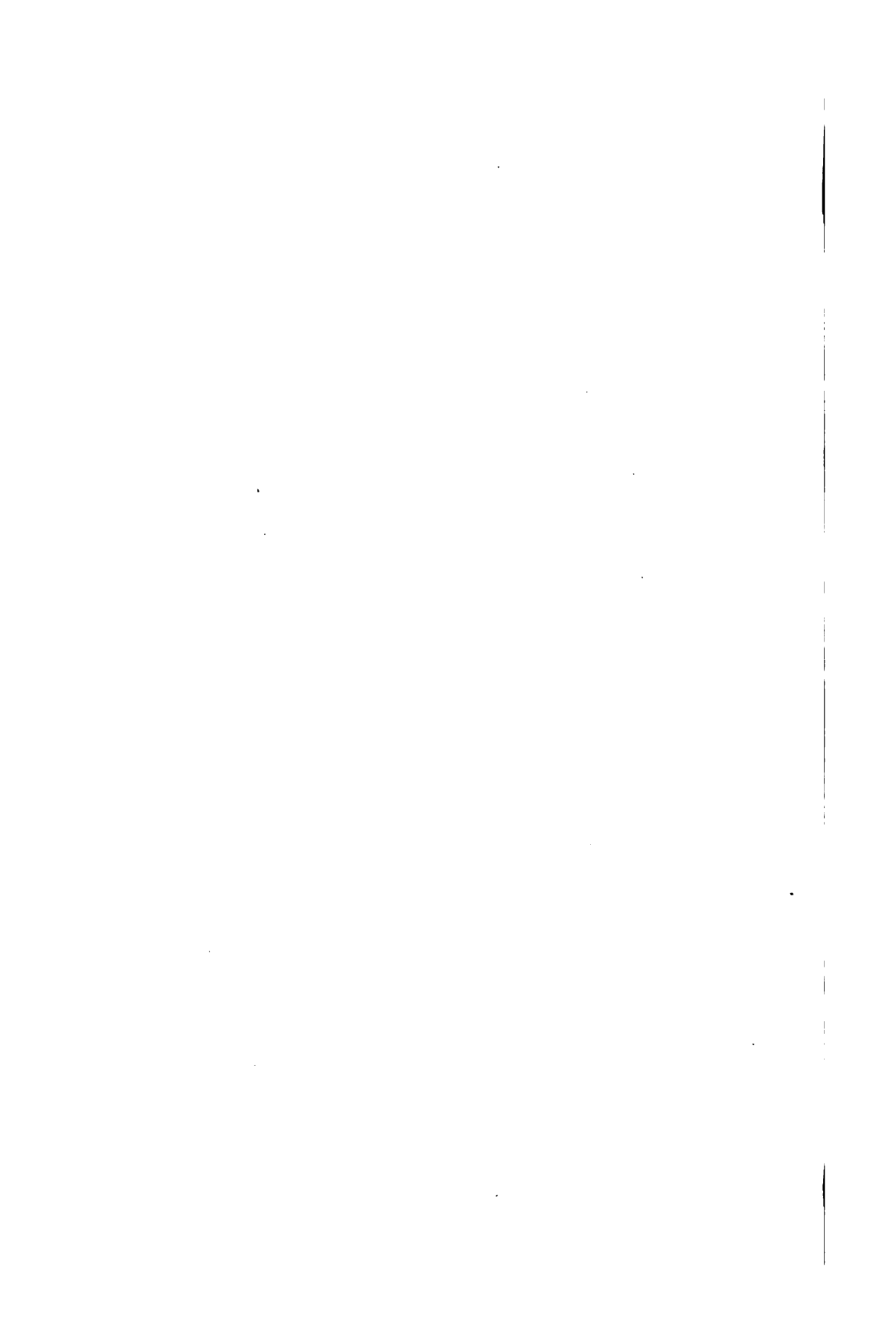
“Both companies will at once prepare their positions for defense.

“Captain B, your company, together with that of Captain D, will constitute the reserve and will take position, under cover, about 100 yards north of here.

“The battalion ammunition wagon will at once be emptied; it will then report to the main body to be refilled, after which it will take position under cover at 26.

“I shall remain here for the present.”

The companies having moved off to take their respective positions, Major A would direct his battalion adjutant, who has made notes of Major A's order, to transmit it to Captain D and order him to fall back at once to the position of the reserve. Major A would also send to the regimental commander a report of his dispositions.



INDEPENDENT CAVALRY*

Situation:

A Blue division, in hostile country, is camped at Winchester (8 miles west of Easton). A detachment of this division is halted for the night 19-20 September, 1907, at Easton, with orders to proceed next day to Fort Leavenworth and secure the bridge over the Missouri at that place. The Terminal bridge at Leavenworth has been destroyed.

At 8:20 p. m., September 19th, Major A, commanding the cavalry with the detachment at Easton, receives the following order:

Hq. Det. 1st Div. 1st Army Corps,
Easton, Kansas,

Field Orders
No. 3.

19 Sept. 07, 8-15 P. M.

Troops

(a) Independent
Cavalry:

Major A.

1st Sq. 5th Cav.
(less 1 plat.)

(b) Advance Guard:

Major B.

1st Bn. 6th Inf.

1 plat. 1st Sq. 5th
Cav.

1 plat. Co. A,
Engrs.

1. The enemy's cavalry patrols have been seen east of the MISSOURI river. His infantry and artillery are reported one day's march east of FORT LEAVENWORTH.

Our division is at WINCHESTER, 8 miles west of EASTON.

2. This detachment will march tomorrow to FORT LEAVENWORTH to secure the MISSOURI river bridge.

3. (a) The independent cavalry will start at 5-30 A. M., covering the movement. It will seize the bridge and reconnoiter east of the river.

* Map of Fort Leavenworth, Kansas, and Vicinity, 8 in. = 1 mile.

(c) Main Body — in order of march:

Lt. Col. C.

6th Inf. (less 1st and 3d Bns.)

Btry. A, 1st F. A.

3d Bn. 6th Inf. (less 1 squad.)

Det. Amb. Sec. 1st F. Hosp.

(d) Signal Troops:

Lieut. D.

1 plat. Co. A.

(b) The advance guard will clear the eastern exit of EASTON at 6 A. M., marching by the EASTON — P-74 — FRENCHMAN — FORT LEAVENWORTH road.

(c) The main body will follow the advance guard at about 800 yards.

(d) The signal troops will establish and maintain a line of information along the line of march between the independent cavalry and EASTON, one of the stations being at FRENCHMAN.

4. The baggage train, escorted by one squad, 3d Bn. 6th Inf., will follow the main body as far as FRENCHMAN.

5. The detachment commander will be with the main body until 7 A. M., and thereafter with the advance guard.

By order of Col. F:

Capt. & Adj. 6th Inf.,
Adjutant.

Before proceeding to a consideration of the special features involved in the situation given above, it will be well to consider briefly the general subject of the employment of cavalry with a mixed command.

Ordinarily, cavalry forming part of a mixed column marches between the column and the enemy. If the enemy be near at hand and combat probable, concert of action between the cavalry and the forces first to be engaged is best insured by attaching the cavalry to the outguard in the direction of the enemy; in such cases, the cavalry is designated ad-

vance guard cavalry, rear guard cavalry, flank guard cavalry or outpost cavalry, as the case may be. If, on the other hand, the enemy is still distant, and there is sufficient cavalry at hand to warrant it, the greater part of that arm should be detached toward the enemy to gain contact and extend the field of reconnaissance; cavalry thus detached receives its orders direct from the commander of the whole force and is designated independent cavalry, the term "independent" having reference to the tactical command.

The cavalry of a column may be similarly detached to a distance to secure a bridge or defile on the line of march, to take up a position on the flank for the purpose of screening a flank march of the column, to secure and hold a favorable defensive position for the main body, and for other special missions of like character.

As a general rule, the cavalry should be employed independently whenever there exists for it a task lying outside the sphere of the column, with reference either to time or place. Whenever the cavalry has been detached to operate independently, a sufficient number of mounted men must be retained with the column to provide for reconnaissance in the immediate vicinity of the latter.

In accordance with these principles, Colonel F has in this case detailed practically the entire squadron as independent cavalry, attaching only one platoon to the advance guard.

From Field Orders No. 3, Major A learns that his squadron (less 1 platoon) is to cover the movement of the detachment and seize the bridge over the Missouri river at Fort Leavenworth. The hour at which the cavalry is to start has been fixed by Colonel F, but the rate of march, roads to be followed,

and conduct in case the enemy is encountered, are matters left entirely to Major A's judgment.

Major A at once sends orders to Captain D, commanding Troop D, to detail a lieutenant and one platoon of his troop for duty tomorrow with the detachment advance guard and to direct the lieutenant to report at once to Major B for orders.

From the information contained in the first paragraph of Colonel F's order, it seems probable that the enemy is advancing toward the river, as his cavalry is reported between the river and his main force. The enemy's infantry and artillery, reported to be one day's march east of Fort Leavenworth, can hardly reach the west bank of the Missouri before tomorrow afternoon, but his cavalry will probably cross to the west bank early tomorrow morning. Upon the approach of our detachment, the hostile cavalry (if unsupported) would be compelled to fall back to secure its line of retreat, and would probably retire east of Salt creek¹ and, by taking advantage of this natural obstacle, endeavor to delay our advance until supporting infantry and artillery could cross the Missouri river and gain the high ground along Sheridan's drive ridge. The enemy's strength is unknown, but if his cavalry were strong it seems probable that it would have been found farther in front of his main force.

To cover the movement of the detachment—i. e., to screen the advance of the main body and protect it from surprise—would require that all roads by which the enemy might advance be carefully reconnoitered and that hostile patrols be kept at such a distance from the main body that they would be unable to observe its movements. From the map it is seen that there are numerous roads leading to the west from

¹ Salt creek has steep banks and muddy bottom and can be forded by cavalry only with great difficulty.

Fort Leavenworth by which the enemy could advance. Efficiently to cover all these roads, Major A's squadron would have to move on a wide front, extending from the Millwood road on the north to the Lecomton road on the south. Communication over such a wide front would be difficult to maintain, and the advance would necessarily be very slow; moreover, if the enemy should be encountered in force, the squadron, while so widely dispersed, could easily be prevented from breaking through to seize the bridge. It is therefore apparent that the tasks imposed on the cavalry are in a measure conflicting. It is for Major A to determine which of the duties assigned him is the most important, and to make his dispositions accordingly, although he cannot completely ignore the less important of the conflicting duties. In this case there is no doubt in Major A's mind of the supreme importance of seizing the bridge, for this is set forth in the second paragraph of Colonel F's order as the special mission of the detachment. If the bridge can be secured and held until the arrival of the main body of the detachment, it will matter little that hostile patrols have observed the movements of our column. The covering duties of the cavalry can therefore be limited to the measures necessary to protect the column from surprise.

From Easton several roads are available for the advance of the squadron, as follows:

1. T—Q—P—80—78—74—Atchison pike.
2. T—R—84—82—78—74—Atchison pike.
3. T—Q—P—O—M—Millwood road.
4. 88—90—96—30—Zimmerman road.

Major A's selection of the road is determined by the following considerations:

1st. He desires to reach his objective as early as possible, for his chances of gaining the bridge unopposed will thereby be increased.

2d. As Salt creek is fordable only with difficulty, he must, if possible, cross by one of the bridges. If his approach is observed while he is still distant from the creek, the enemy may block him by tearing up the bridge-flooring and oppose him with dismounted fire; in such an event he would be seriously delayed and, unless considerably superior in force, he would be unable to force the passage of the stream.

While No. 1 is the most direct road to Fort Leavenworth and has therefore been selected by the detachment commander as the route for the detachment, the commander of the independent cavalry, Major A, not being charged with advance guard duties, is not compelled to march his squadron by this road, although he must of course keep it under observation.

Roads 3 and 4 are much longer than 1 and 2 and possess no special advantages.

Road 2 is not much longer than road 1 and is much less exposed to observation from the high ridge west of Fort Leavenworth. With proper caution the squadron may be able to advance by this road as far as 74 without being discovered; patrols sent forward rapidly via the Millwood road and Atchison pike can quickly get word back about the bridges; if the crossings on these roads are found to be blocked, the squadron may, by a dash to the south, succeed in crossing at 100 and gaining the high ground east of the creek. From this position the squadron can operate against the Missouri river bridge or assist the advance of the detachment along the Atchison pike.

The advance from Easton should be made at a rapid gait, alternate trot and walk; patrols should move at increased speed and send back reports of the bridges over Salt creek in time to meet the squadron commander when he arrives at 74.

Summarizing the above conclusions, Major A

decides to move rapidly from Easton via road 2, sending one troop to the front as advance guard and covering the parallel roads with strong patrols.

In order that the independent cavalry may accomplish its most important task (i. e., the seizure of the Missouri river bridge), it will probably be necessary to defeat and drive back the hostile cavalry. Major A's squadron must therefore be kept well in hand, ready for instant action. The covering duties of the cavalry will be sufficiently performed by patrols over the Millwood, Zimmerman and other nearby roads, as such patrols will give timely warning of the approach of any considerable force of the enemy via those routes.

Major A, having formed his decision, assembles his troop commanders at 9 p. m. and, with the aid of the map, issues the following verbal orders:

"Red cavalry patrols have been seen east of the Missouri river. Red infantry and artillery are reported one day's march east of Fort Leavenworth.

"Our detachment advances at 6 a. m. tomorrow on Fort Leavenworth to secure the bridge across the Missouri at that place. A platoon of Troop D has been detached for duty with the advance guard of the detachment.

"This squadron (less the platoon just mentioned) has orders to cover the movement of the detachment and seize the bridge at Fort Leavenworth.

"Troop A will form the squadron advance guard, leaving camp at 5:15 a. m., and will proceed via R-84-74-Atchison pike to Fort Leavenworth, maintaining a distance of about three-fourths of a mile from the main body of the squadron. Strong patrols from Troop A will ride rapidly over the Millwood and Zimmerman roads and will watch the parallel roads in the vicinity of their respective routes. Report as

to the bridges over Salt creek must be sent me promptly.

“The remaining troops of the squadron will constitute the main body and will be formed up, ready to leave camp, at 5:30 a. m.

“Our baggage wagons will march with the baggage wagons of the detachment.

“I shall ride with the main body of the squadron.”

CAVALRY AGAINST CAVALRY*

Situation:

A Blue force in hostile country is advancing from the southwest to occupy the city of Leavenworth. The city is garrisoned by a small Red infantry detachment which is covering the withdrawal of valuable military stores from that place northward over the M. P. R. R. A strong force of Red cavalry is in the vicinity of Atchison (twenty-five miles north of Leavenworth). Fort Leavenworth is unoccupied. The country east of the Missouri river is neutral territory.

The Blue force expects to reach Leavenworth October 12th. All of its cavalry (1st Squadron, 1st Cavalry, under command of Major A), has been pushed ahead as independent cavalry, with orders to so interrupt the M. P. R. R. north of Leavenworth¹ as to prevent the removal of the Red stores before October 13th, after which the squadron is to return to the headquarters of the Blue force. The squadron reached the vicinity of Leavenworth on October 11th without seeing anything of the enemy and, avoiding the city, proceeded directly to the M. P. R. R. bridge over Salt creek and destroyed it. The squadron then began to further interrupt communication by tearing up portions of the track south of the bridge. Major A covered the working party by sending patrols along Sheridan's drive and to the west and south; these patrols, early in the afternoon, had seen and driven back some Red mounted scouts.

Map of Fort Leavenworth, Kansas, and Vicinity, 4 in.=1 mile.

1 On such an expedition as this the squadron would not be accompanied by its baggage wagons or by a pack train.

At 3:55 p. m., when the task of the squadron is about completed, Major A, who is at 5, receives the following message, sent at 3:50 p. m., by a patrol on the Millwood road: "Column of hostile cavalry, strength unknown, is descending hill on Millwood road one and three-fourth miles west of Salt creek and is advancing eastward. Will continue in observation."

Major A's orders are specific. He has first, to interrupt the enemy's railroad communications, and second, to return to the headquarters of the Blue detachment. The first of these he has practically accomplished; when the message is received, he is merely waiting to assure himself that the interruption is complete. One platoon of Troop A is furnishing the patrols—of which there are six, viz., one on each of the following roads: The Millwood road, Atchison pike, Zimmerman road, Barnes road, and Sheridan's drive, while one is watching the country between Fort Leavenworth and Leavenworth. The remainder of the squadron is scattered along the railroad north of 5, but each troop has its led horses near at hand. It was not possible for Major A to conceal his presence and mission from the inhabitants of the country, and he knew it was useless for him to attempt to prevent them from sending this information by local telephone and telegraph to the hostile cavalry to the northwest. The exact whereabouts of this cavalry was not known, but Major A, ever since the enemy's mounted scouts were seen and fired upon earlier in the day, has been expecting some such message as that just received.

Safety to his squadron, if it be assailed by superior cavalry, lies in reaching the Blue detachment, which will camp ten or fifteen miles southwest of Leavenworth for the night of October 11-12. Unless

other hostile cavalry makes its appearance south of Fort Leavenworth, Major A thinks that, if he retires rapidly, he will have no difficulty in moving thru Fort Leavenworth and in skirting the western edge of the city of Leavenworth, for the weak infantry detachment at the latter place is not likely to go far from the supplies it is guarding; furthermore, Major A wishes to keep the line of hills between himself and the open country to the west where the enemy has appeared. Upon receipt of the message, therefore, Major A at once decides to retire to the southwest with all haste. He turns to his trumpeter and tells him to sound "to horse"; he then orders his adjutant to tell the troop commanders to report at once with their troops at the road fork at 5, after which the adjutant is to form the squadron, in column headed south on the road to Fort Leavenworth, with Troop A in the lead. (Major A had previously decided that, upon his withdrawal, Troop A should form the advance guard, since one of its platoons was already on reconnaissance.)

As soon as the troop commanders have assembled, Major A gives the following verbal orders:

"A column of hostile cavalry was seen four miles west of here twenty minutes ago. It was moving this way on the road which leads through the woods from the northwest (indicating the 5—Prison cemetery—9—11 road).

"We will withdraw to the southwest at once.

"Captain A, your troop will be the advance guard. Take this road (indicating the direct road to Fort Leavenworth) and, after reaching Fort Leavenworth, bear to the west and take the road skirting the foothills and passing to the west of Leavenworth. Make your distances short. Move out at once. Gain your distance at a gallop, then come down to a trot.

"Captain B, you will command the main body and will follow at 400 yards. Detail one platoon as rear guard.

"I am going with the advance guard."

A few minutes after 4 p.m. the squadron moves out at a trot, the advance guard gaining its distance at a gallop, after which it also takes the trot. Captain A has his advance guard disposed as follows: one platoon in the advance party 150 yards in rear of the point, and two platoons in the support 300 yards farther to the rear. Major A is at the head of the support. Just as the support starts off, Major A is handed the following message, sent from Hancock hill at 3:55 p.m. by Lieutenant Z, an officer of Troop A:

"One squadron hostile cavalry advancing eastward on Millwood road. Point of advance guard nearing woods just north of here, but is checked by fire of patrol on Millwood road and of my patrol from this hill. Will attempt to delay enemy's advance through woods."

This message considerably clears up the situation for Major A. He believes that Lieutenant Z will be able to check the enemy's advance sufficiently long to permit the Blue squadron to get well on its way, provided its march is not impeded by a hostile force to the south. There are good reasons, however, for believing that the enemy will appear also on the roads south of Fort Leavenworth. If the enemy receives information of the presence of a squadron of Blue cavalry in the vicinity of Leavenworth, it is probable that he will send against it a stronger force than one squadron—probably two squadrons, if not an entire regiment. The enemy knows that the interruption of the railroad will be made north of Leavenworth; he therefore will be able to locate the Blue squadron with considerable accuracy. If he has

more than one squadron, he may divide his force and close in on Major A from west and south simultaneously, with perhaps the larger part of his force to the south. Major A has reflected during the day on the probability of such an attack from the south, but has depended on his patrols to give him timely warning of the approach of an enemy from that direction. He now thinks of this and is more fearful of a hostile force appearing to the south than he is of the squadron reported on the Millwood road. Early in the day he had Lieutenant X make a careful reconnaissance of the open country between Leavenworth and Fort Leavenworth and has used this information to supplement his study on the map, which was far from accurate in details.

After reading the second message, Major A gives it to his adjutant and directs him to show it to the commander of the rear guard and, as he passes the main body, to inform the other three troop commanders of its contents. He then tells Captain A (who is with him) what the message contains.

As Major A, at the head of the support, trots up the hill toward the U.S. Military Prison, he is handed the following message, sent at 3:40 p. m. by a patrol on the Zimmerman road at a point about one and one half miles west of Leavenworth.

“Column of hostile cavalry advancing toward Leavenworth on Zimmerman road. Appears to be at least one squadron. Advance guard of one troop just passing this point.”

Before Major A can reflect at all on this message and just as he is passing the prison, a trooper from one of his patrols gallops up and informs him that, at 4:05 p.m., from Merritt hill, his patrol observed a troop of Red cavalry trotting northward on Prison lane; that this troop, when first seen, was just passing the U.S. Penitentiary.

Major A's immediate conclusion is that the message received from the patrol on the Zimmerman road and the information just given him by the last messenger refer to one and the same force, which is evidently advancing directly against him. At the same moment firing is heard to the west, apparently on Sheridan's drive, and also in the woods to the north and northwest. Major A can not turn back. The enemy is too close upon him to permit him to escape through the woods to the west; moreover, the firing indicates that the squadron reported on the Millwood road has sent a detachment south on Sheridan's drive to close that avenue of escape. If he dismounts and takes up a defensive position to hold off the hostile cavalry to the south, he will be caught by the squadron advancing from the north and west. He believes that his only chance is to make a sudden mounted attack on the southern force, throw it into confusion, and break through and escape before it can recover from its surprise and disorder—and before the squadron coming through the woods can be upon him. From Lieutenant Y he has learned that the terrain from Kearney avenue south along Prison lane to the north branch of Corral creek is rolling pasture land with but one serious obstacle—the deep and wide ditch south of Engineer hill; however, there is ample unobstructed ground between the National cemetery and Prison lane for a platoon to charge in line. The enemy's strength in this direction is not absolutely known, but it is probably a squadron, and the distance from the point of its advance guard to the rear of its main body is probably not less than 1200 or 1400 yards. If Major A's attack be made too soon, the enemy's main body will be south of the north branch of Corral creek and, with this obstacle in his front, the enemy will have ample time to prepare for action under cover of

Long ridge. Consequently the attack should be delayed, if practicable, until the enemy's advance party has reached the West End parade, and the Blue squadron must in the meantime be concealed so as to prevent discovery of its position.

The situation is one demanding immediate decision. There is no time for deliberation. Cavalry will frequently be placed in just such trying positions, and its delivery from them will depend almost wholly on the ability of its leaders to remain so calm and collected, under the stress of impending danger, as to be able to decide in a very few moments on a rational course of action. When cavalry is operating against cavalry, the opportunities for successful mounted action, although frequent, are yet so fleeting that, if advantage is to be taken of them, action must be well nigh instantaneous. And herein lies a difference between infantry and cavalry tactics. With infantry against infantry, the scene is more slowly changing; there is more time for mature thought and consequently there is more reason for proper tactical dispositions when a decision is finally reached, especially since mistakes are not so easily and quickly corrected with infantry as with the more rapidly moving cavalry. Although a correct tactical decision is no less important with cavalry, yet the first consideration is prompt and opportune action. If time be taken to carefully compare several alternate plans of attack, the opportunity for making the one plan of attack that has promised success from the start may pass without advantage being taken of it. An attack, made in accordance with a hasty decision but at the right moment, although it may have tactical defects, will give better results than one more carefully planned but delivered before or after the opportune moment.

Major A's decision is just such a hasty one as is

referred to above. It is to close up his column, conceal the squadron behind the buildings along Kearney avenue and, at the proper moment, charge the enemy along Prison lane and cut his way through to the south. It might be better to do something else, such as to combine mounted and dismounted action, or to move down Grant avenue (or west of the National cemetery) and strike the enemy in flank, or to attempt to steal out through the woods, or to occupy the buildings and hold the enemy off. But the enemy is upon him; whatever he does must be done at once; deliberate thought and careful plans are out of the question; he has had all day to think—now is the time to act; to charge straight at the enemy is a plan which at first thought promises success, and he adopts it.

Turning to his adjutant, Major A directs him to tell Captain B to have the main body close up on the advance guard. To Captain A, he says: "A column of the enemy is reported coming toward Fort Leavenworth along Prison lane. Tell your point not to advance beyond the cover of yonder buildings (indicating the buildings east of West End parade). Halt your advance party and close up the support on it."

When the support has joined the advance party, Major A calls Lieutenant Y, who was with the advance party, and says to him: "A column of hostile cavalry is advancing on Prison lane. The squadron will soon charge it. Take four men, go down this street (pointing to McClellan avenue) to a point from which you can observe the enemy. Let me know if he should turn off Prison lane. The squadron will be concealed behind yonder barracks (indicating the artillery barracks just north of West End parade)."

By this time (4:13 p. m.) the main body is immediately in rear of the support, having closed up at a gallop. Major A then moves westward with the

column and conceals it behind the artillery barracks just north of West End parade. At the same time Major A sends an orderly with verbal instructions to the troop officers to report at the head of the column. When they have reported, he gives them the following verbal orders:

"At least a squadron of hostile cavalry is approaching on that road (indicating Prison lane).

"The squadron will charge the hostile column, cut its way through and assemble at the northwestern outskirts of Leavenworth.

"Captain A, you will attack the enemy's advance guard with your troop. Your first two platoons will charge as foragers; your remaining platoon in close order.

"Captain B, you and Captain C will charge the enemy's main body. Captain B, you will charge in column of platoons. Captain C, you will use your own judgment as to your formation—which will depend on circumstances. Both of you will keep your troops in column of fours on the road or in column of platoons west of the road until you have passed the cemetery, as the ground east of the road at that point is impassable.

"Captain D, your troop will form the reserve. Call in the rear guard as soon as the charge begins.

"I will give the signal for the charge and will remain with the reserve."

A moment after issuing this order (at 4:17) Major A sees a hostile patrol approaching across the West End parade and knows that the presence of his squadron cannot much longer be concealed. Consequently, he immediately gives the signal for the attack, and his command moves out as ordered. The leading troop at once takes the gallop, the foragers (with reduced intervals) passing without difficulty

through the fringe of woods and following closely on the heels of the fleeing hostile patrol. As the foragers mount the slight rise in the ground along Pope avenue (at B), Captain A sees a hostile troop approaching at a trot in column of fours on Prison lane, its head about 500 yards away, and at once gives the command to charge. The hostile troop, evidently taken completely by surprise, wavers a moment and then breaks to the rear—but not before the foragers are upon it (4:19) and have unhorsed a number of men by firing into the confused mass. The larger part of the dispersed troop flees to the west of Prison lane, closely pursued by the foragers. The remaining platoon of Troop A (in close order) has followed about 100 yards in rear of the foragers without being drawn into the combat. As it passes along the cemetery (4:20), its leader observes about a squadron of hostile cavalry about 800 yards away in the act of executing "troops left front into line", and instantly decides to lead his troop against the leading hostile troop. A minute later (4:21) it strikes the enemy, who is not yet in full career, breaks thru the center of the leading troop, and throws the following troop into some confusion.

At this time (4:21) Captain B, who has observed the combat in his front, is opposite the cemetery with his troop at the gallop and immediately followed by Troop C (both troops in column of platoons). He commands "to the charge" and each platoon in succession takes the charging gait as it passes the ditch opposite the center of the cemetery, the distance between platoons being about 50 yards. The column strikes the head of the hostile column near the southeast corner of the cemetery. The enemy has not yet completely recovered from the confusion already created in his ranks, and the four platoons of Captain B's troop pass thru the hostile column of

three troops, splitting it in halves. The four platoon commanders of the second troop, acting on their own initiative, lead their platoons slightly to the right and left and meet the overlapping portions of the enemy's lines. The melee lasts less than half a minute and, at 4:23, the Red cavalymen are fleeing from the field, some toward Merritt hill but most of them toward Corral creek and Long ridge.

The speedy retreat of the enemy was no doubt largely due to the presence of Major A's reserve troop. This troop, in column of fours, at a gallop, had followed Captain C's troop at a distance of about 200 yards (i. e. about 600 yards from the leading platoon of Troop B) until the charge began, and was now about 300 yards from the point of collision of the two columns; upon observing its approach, the enemy fled. After picking up a number of unhorsed and slightly wounded men (the seriously wounded being left on the hill), this troop (D) turns off to the west toward the target range and, at 4:28, is drawn up on the high ground at the southern end of the range to cover the assembling of the other three troops. The latter, on the retreat of the enemy and pursuant to their original order, had hastened to make good their escape to the southwest. Their officers had been able to rally a few men about them and with these as nuclei they are now (4:28) attempting to assemble their troops in rear of the reserve, when all are fired on from the direction of the railroad cut (near E) and a moment later from the direction of Long ridge.

It is at once apparent to Major A and the various troop commanders that the squadron must be assembled farther to the south. Without waiting for orders, the commanders of the three troops that were in the charge lead the men they have with them towards Atchison Cross, being joined by others along

the way and at that point. Major A directs the reserve troop to follow as a rear guard and hastens on to join the other three troops. He comes up with them south of Atchison Cross where the officers have been able to bring the disorganized column to a trot. He finds the troops intermingled but in column of fours. Without changing the gait of the troops, he directs each of the troop commanders to take command of one third of the column but not to attempt to assemble the troops. At 60 he turns the column westward on the Barnes road and directs the leading troop commander to send forward 50 men, under an officer, as advance guard. All of the men have by this time "counted fours", and Major A intends to postpone the regular "assembly by troop" until he is somewhat farther away from the enemy.

CAVALRY AGAINST INFANTRY*

Situation:

A Blue army is moving southward thru Missouri against a Red army in the vicinity of Kansas City. Leavenworth and Fort Leavenworth are unoccupied, but it is known that there are several small Red detachments in eastern Kansas.¹

When the advance troops of the Blue army reach the vicinity of Platte City, Missouri, early in the forenoon of October 31, 1907, Colonel A, 1st Cavalry, is given the following order:

"It is reported that small detachments of the enemy are marching from the west on Leavenworth. Proceed at once with your regiment to Leavenworth, secure the Terminal bridge and prevent the enemy from occupying the hills about the town. You will be relieved by other troops tomorrow."

At Leavenworth Colonel A learns from a sympathizer that a battalion of Red Infantry is approaching from the west and is expected to reach Leavenworth about noon. Leaving Troops L and M to guard the bridge, Colonel A continues westward via the 60-56-44 road with the remainder of his regiment, detaching Troops A and B (Major A, commanding) as the advance guard.

On receiving a message from the advance guard to the effect that a battalion of hostile infantry has just reached 44 from the west, Colonel A halts the main body with its head at 60 and directs Major A to reconnoiter and report. At 11:00 a. m. Major A re-

* Map of Fort Leavenworth, Kansas, and Vicinity, 8 in. = 1 mile.

¹ The bridge over the Missouri river at Fort Leavenworth has been destroyed. The country is hostile to the Blues.

ports that but one hostile battalion has been seen and that it has halted on the ridge crossing the Barnes road just west of 44, and that all the principal roads to the west are covered by his (Major A's) patrols, who report that they have seen no signs of the enemy.

Colonel A's mission is definitely stated in the order directing him to proceed to Leavenworth. The full execution of this mission demands that he shall hold the Terminal bridge and keep the enemy from the high ground around Leavenworth until the arrival of the troops that are to relieve him tomorrow. Plainly, he must attack and drive back the hostile battalion in his front. This he must do without unnecessary delay; his force is not large, and, if the scattered detachments of the enemy be permitted to unite, their combined strength may be sufficient to drive him back across the river; he should, if possible, be ready to turn against each of the separate hostile detachments as rapidly as his patrols bring him information of their whereabouts.

Although the two troops left at the Terminal bridge might be of very great assistance to Colonel A in the contemplated engagement, nevertheless, his opinion as to the necessity of keeping them in the immediate vicinity of that bridge has not changed since he has gained contact with the enemy. Even if he finds it impossible to fulfill the latter part of his mission—i. e., to keep the enemy from occupying the hills about the town—he must at least hold the Terminal bridge, for the latter is on his only line of retreat and will, moreover, be needed for the crossing of the troops which are to relieve him on the morrow. Although Colonel A feels that Troops L and M must remain out of the fight, he will be very

careful to see that no other considerable portions of his command are absent from the scene of action. All probable lines of hostile advance are already covered by Major A's patrols, and for Colonel A to detach a troop or so as an additional precaution against surprise would be most unwise; the patrols now out should be sufficient to give him early warning of the approach of other hostile forces, and he needs every man of his present command for the impending engagement.

The hostile infantry in his front is not accompanied by cavalry. This explains the unusually complete information of its strength and position that the Blue advance guard has been able to secure; Colonel A is thus enabled to make his plan for the attack with more than ordinary certainty.

The present intentions of the enemy are not known. He may be contemplating a retreat; he may fight a purely defensive engagement; or he may himself take the offensive in the hope of fighting his way through to Leavenworth, his probable objective. Colonel A's plan of attack should be such as to meet any one of these contingencies so far as that is possible. If the enemy retreat, his escape must be prevented by placing a force in his rear or on his flank; if he stand on the defensive, he must be crushed; if he advance, his attack must be met by a more vigorous counter-attack. Although these points are borne in mind by Colonel A when deciding upon his plan of attack, he believes it most probable that the enemy will make a stand at the position where he is now halted, i. e., near 44.

To make a frontal attack upon the enemy with a considerable portion of his force, and send the remainder via the Zimmerman—100—104—46 road or by the Lecompton—106—46 road to attack the enemy directly in rear would involve an unnecessarily

long detour (resulting in a proportionately great loss of time), would make co-operation between the main and secondary attacks very difficult, if not impossible, and would have no compensating advantages. The probable lack of proper co-operation, the difficulty of correctly timing the main and secondary attacks and the inability of the commander to exercise control over his whole force at the crucial moment, would be very likely to cause such an attack to fail.

For Colonel A to attack in such a way as to close every possible avenue of escape for the defenders is impossible; even if it were possible, it would not be advisable. If Colonel A close all of the enemy's possible lines of retreat, the defenders may resist more stubbornly—and possibly succeed in maintaining their position; on the other hand, if some loopholes of escape (real or apparent) be left, the defenders may abandon their position without waiting to receive the attack, the retreat may be turned into a rout and the retreating force captured or destroyed with comparatively little loss to Colonel A's command.

The attack might be made dismounted along the 60—56—44 road, extending one or the other flanks to envelop the enemy; the ravine about 500 yards east of the 50—52 road would furnish cover for the enveloping movement in such an attack. This plan, however, aside from having all the disadvantages of a frontal attack, would, if successful, merely drive the enemy straight back on his line of retreat; moreover, the troops making the main attack would doubtless become considerably disorganized in passing thru the thick woods on the steep sides of the ravine mentioned, and the delivery of the attack would be greatly delayed on account of the difficulties of the terrain.

The attack might be made by sending a portion

of the force dismounted along the 56—40 road against the enemy's front while sending the remainder of the force mounted to reach the enemy's right or left flank and then to attack dismounted; if sent to the enemy's left, this force could move on the Zimmerman road, and if sent to his right it might go via the 68—50 road or the 66a—136—50 road. On or along all of these roads the turning force might be concealed until quite near the enemy.

An attack from the north against the enemy's left is open to the same objection—though in a less degree—as is a frontal attack; it would push the enemy back on his line of retreat. An attack from the south against the enemy's right would drive him toward the north and away from his most direct line of retreat. Whether the main attack be made from the north or from the south, it will not be difficult to reach the enemy's rear with a part of the attacking force moving on trails or across country; it may, however, be a trifle easier to do this from the south.

If the turning column advance along the 68—50 road, it should be discovered by the enemy's patrols as it approaches 50; the plan of attack would then become known to the enemy who would have ample time to send his reserve toward 50 to meet Colonel A's main attack, and the action would probably develop into a purely frontal attack; at best it would be but an enveloping movement. If it advance along the 66a—136—50 road, keeping under cover of the slope west of the 136—50 trail, it has a good chance of reaching the vicinity of 50 and 48 without being discovered and will then be in a position to fall squarely on the enemy's right and rear, perhaps before he has had time to make dispositions to meet the attack; at any rate the two portions of the attacking force would then be advancing towards a common center, while

the two wings of the defender's line would be at right angles to each other.

If this plan be objected to on the ground that it entails too great a dispersion of Colonel A's force, the answer is that dispersion which would often lead to disaster with a small infantry command is quite as often the best plan for certain and speedy victory with a small cavalry command when operating against infantry.¹ The superior mobility of the cavalry gives it much greater license in this respect and enables it to make wide turning movements that would not be permissible with infantry. In this particular instance, for example, the cavalry can go from 60, via 66a and 136, to 50 in about fifteen minutes; it would take infantry about forty-five minutes to do the same; the cavalry can therefore arrive at 50 in time to support its secondary attack along the 64—56—44 road; infantry, moving by the same route, probably would not arrive until after its secondary attack had been driven back.

Colonel A has still to determine the strength of the various subdivisions of his force. Two troops of the 1st Squadron are now in the advance guard. If the remaining two troops of this squadron be sent to Major A, he will have at least 300 dismounted men with which to push a vigorous attack against the enemy's front. The terrain along the 56—44 road, with its woods and numerous ravines to conceal an attacking force, adapts itself well to the secondary attack, and there should be little danger of Major A suffering a reverse before the main attack is made. Six troops are left for the turning movement, four

¹ The reverse, however, is the rule when cavalry is operating against cavalry; in the latter case, the cavalry should be kept well in hand and concentrated to a far greater degree than is necessary when operating against infantry; otherwise, the hostile cavalry may be able to defeat it in detail before it can unite.

(the 2d Squadron) for the main attack proper and two for the reserve. If the latter be echeloned on the left of the main attack, it can find cover in the vicinity of 48, where it will be in a position to assist the main attack or cut off the enemy's retreat. The wooded slope leading up to the enemy's position from 48 will favor the operation of this reserve. The machine gun platoon will accompany the main attack, partly to secure a greater volume of fire on the enemy's flank, and partly because the ground along the 136—50 ridge favors its employment.

Consequently, Colonel A's decision is to have the secondary attack made along the 56—44 road by one squadron, while he himself leads the remaining six troops via 66a—136—50 to reach and attack the enemy's right and rear, holding two of these troops in reserve near 48.

Having reached this decision, Colonel A gives orders for the officers with the main body to assemble; upon their arrival he issues the following verbal orders:

"A hostile battalion has just halted on this road (indicating the road 60—56—44) at the point where it crosses the ridge about a mile and a half in our front, and is probably preparing to defend its present position. Our patrols are covering the country toward the north, west and south, but have discovered no other hostile troops.

"We will attack at once, turning the enemy's right flank.

"Major A, with his squadron, will make the secondary attack along this road (indicating the road 60—56—44) in support of the main attack.

"I will take the remaining six troops south on this road, (indicating the road 60—66a) for a mile, then west a mile and then northwest towards the enemy's position.

“Major B, you, when directed, will make the main attack, dismounted, with your squadron and the machine gun platoon, against the enemy’s right flank.

“Captain I, your troop and troop K will form the reserve under your command. I shall give you your orders later.”

Colonel A then turns to Captain C and says:

“Captain C, you will move up this road with Troops C and D and report to Major A. Tell him that he is to attack at once dismounted up this road (indicating the road 60—56—44) and that I am going to make the main attack with the remaining six troops and turn the enemy’s right.”

Colonel A satisfies himself that all—and especially Major B and Captain C—thoroly understand the situation and the plan of attack. He then says:

“Captain C, move your two troops out at once at the trot. Captain E, form with your troop a new advance guard for the main column. Move out at a gallop until you have gained about 500 yards distance. Major B, you will follow at the trot with the remaining troops. I shall accompany the advance guard.”

Captain C then moves westward with Troops C and D and Colonel A starts southward with the other six troops.

The advance guard of the main column turns westward at 66a and reaches 136 without incident. By Colonel A’s order the advance guard then moves northwestward, keeping west of the farm road 136—50 so as to keep out of sight, as long as possible, of any hostile troops in the vicinity of 44.

When the advance guard reaches the ravine 1000 yards northwest of 136, Colonel A orders Captain E

to assemble his troop and dismount to fight on foot. The main body arrives while Troop E is dismounting (the advance guard's distance having been reduced to only about 300 yards thru the broken country traversed after passing 136). Colonel A then gives Major B the following order:

"Dismount your squadron, leaving only such horse-holders as are absolutely necessary and a mounted guard of one platoon. Move northward under cover as far as possible before deploying, then advance along the ridge against the enemy's position, enveloping his right flank. Get the machine gun detachment into action as soon as possible. The reserve will follow echeloned behind your left flank. I shall accompany you for the present."

About this time the sound of heavy firing is heard to the north, indicating that the secondary attack is well under way. Major B at once dismounts Troops F, G and H (less one platoon of Troop H), orders all his troop commanders to leave only one horse-holder for the horses of each squad, and directs the commander of the mounted platoon to guard the led horses and keep a lookout to the south and west.

Major B then moves forward with his squadron in column of fours, preceded by a platoon in skirmish line, until he reaches the spur extending south-westward from 50. Here the advance platoon is fired upon from the vicinity of 50. Major B then deploys his squadron and advances. Considerable fire is received from the high ground north of 50 and a few shots from the woods west thereof. The line, however, continues to advance, altho, before the left wing has gained the shelter of the woods west of 50,

the entire squadron has been forced to advance by rushes, first by troops and finally by platoons.

As soon as the left wing enters the woods, the reserve moves forward without loss to the 48-50 road. Here it would be held, by Colonel A's orders, to await further developments. If necessary, one or both troops would be dismounted and pushed ahead to reinforce the firing line; otherwise, the reserve would stay mounted under cover, ready to take up the pursuit to the northward or westward according to circumstances.

In the attack of this position (assuming that Major A has as many dismounted men in action as has Major B), the main and secondary attacks would each be made by about 343 dismounted men (400 men less 32 horse-holders and 25 mounted men), a total of 686 rifles in the two firing lines. If one of the reserve troops were to employ but three fourths of its strength in the dismounted action, the total number of rifles in action would be 761; if both reserve troops were to be thus employed; the total would be 836 (plus the machine guns) as against about 500 rifles in the enemy's entire force.

If the attack succeeds—and there seems to be every reason why it should—the duty of initiating the pursuit will fall upon the reserve. If it has been necessary to put the reserve, dismounted, into the action, their led horses (due to their being a sufficient number of horse-holders with them to permit of leading the horses in column of fours) would at once be brought up, the troop mounted and the pursuit begun. Each of the other troops would, however, have to send back to their horses 15 or 20 men as additional horse-holders before the horses could be brought up, for at least 1 man to every 4 horses is needed in order to enable led horses to be moved without confusion or delay.

If Colonel A is successful in defeating and routing the hostile infantry, he will not permit a protracted pursuit to be taken up, but will content himself with thoroly dispersing them and preventing their reassembly; he will, however, keep in touch with the defeated force, and will continue to observe, with patrols, the various routes by which other parties of the enemy might advance on Leavenworth.

MARCH AND DEFENSE OF A CONVOY*

Situation:

The Missouri Pacific railroad forms the line of communications of a Blue force, based on Kansas City and operating against a Red force in the vicinity of Omaha.

Leavenworth is garrisoned by one battalion of Blue infantry and one platoon of cavalry, under the command of Major B. There is another garrison of Blue infantry and cavalry on the railroad about eight miles north of Kickapoo.

On the morning of October 16, 1907, a raiding force of Red cavalry appeared at Kickapoo, interrupted the railroad some distance north of that place and destroyed the railroad bridge over Plum creek. This hostile cavalry then hastily withdrew to the westward and has not been heard of since that time. The bridge can not be repaired for some days, but the railroad, from Kickapoo northward, will be open by noon of October 17.

At 6 p.m., October 16th, Major B directs Captain A to take his company, with two mounted orderlies and the platoon of cavalry, and escort a train of 40 four-horse wagons, loaded with provisions, from Leavenworth to Kickapoo on the following morning for shipment to the front.

The weather has been very dry for several weeks. The roads are in good condition but very dusty. The country is hostile toward the Blue forces.

The protection of a convoy on the march presents difficulties not connected with the protection of a marching column of troops. These difficulties arise

* Map of Fort Leavenworth, Kansas, and Vicinity, 4 in.=1 mile.

mainly from the great length and unwieldiness of the convoy, the length of time required to put it in a state of defense and from its own inherent weakness. The advance, flank and rear guards of a column of troops know that, if they are not strong enough to hold off the enemy, they will be reinforced by detachments from the column which they are covering—and this knowledge adds greatly to their morale. Not so with the covering detachments of a convoy; on the contrary, their morale is impaired by the thought that, if they are driven back, it will be upon a defenseless lot of wagons, possibly in disorganized rout. This is all the more probable when the teamsters are impressed civilians, as will often be the case. It requires a high order of courage to inspire a driver to stand calmly on the road and await the issue of a struggle for the possession of himself and his wagon.

A single stray shot striking a horse or driver may be sufficient to rout the convoy. The probability of this may be lessened by strengthening the police guard, but the escort is thereby weakened. There is but one certain method of preventing disaster from this cause, and that is to avoid contact with the enemy. Of course this is not always possible or even probable, but the wise and prudent commander will resort to every practicable precaution in his efforts to avoid a fight and the two points he will ever keep in mind are: to conduct his convoy safely to its destination, and to make every effort to avoid an engagement with the enemy. The accomplishment of these two objects largely determines every disposition he makes from the moment the convoy moves out until it has reached safety. What road shall be taken? How shall the convoy be divided? How shall the escort be distributed throughout the convoy? How shall this bridge or that wood be passed? What shall he

do if the convoy be attacked here? If the enemy appear on yonder hill, shall the convoy be parked, turned off on this by-road, or sent to the rear? These are a few of the questions the convoy commander will constantly be asking himself, ever with the idea of preventing the enemy from delivering effective fire on the wagons.

Captain A's first problem on receiving his order is to determine what road he shall take. There are three roads leading from Leavenworth to Kickapoo, viz., via Fort Leavenworth and Prison cemetery, via Sheridan's drive, and via Atchison Cross and Frenchman. So far as it is possible to judge from the meager and indefinite information of the enemy, Captain A is about as likely to encounter opposition on any one of these roads as on either of the other two. The enemy disappeared to the westward; but he may appear again at any moment and may even now be in the vicinity. The enemy is in his own country and his movements will be more bold for this reason. The situation is far from being clear to Captain A, but that is the rule in war. It is useless for him to speculate on the enemy's movements; he must simply be prepared for any emergency.

Each of the three available roads has its advantages and disadvantages. The first two are a mile or two longer, but this would be an insignificant matter, especially where so short a march is concerned, were these routes desirable in other respects. A convoy may often turn off on by-roads or retrace its steps for many miles in order to avoid combat, or it may reach its destination by a circuitous route which will place an obstacle between it and the enemy.

Both of the first two routes, throughout a large part of their length, lead away from the point from which the enemy may be expected to appear, and the first is under cover from his view. Placing as much

distance as practicable between the convoy and the enemy and keeping the convoy concealed from the enemy's view are advantages well worth trying for—whenever they may be truly attained—but in this case they are more apparent than real, since the convoy must march directly towards the enemy from 11 to 17.

However, the great drawback to these two routes, and one which outweighs all their advantages, is that both are in the nature of a defile. They pass through dense woods from two to three miles deep, are unimproved, have steep grades, and are too narrow to permit wagons to countermarch. Were the enemy to surprise the convoy in these woods, it should not be difficult for him to check the column, throw it into great confusion and inflict serious damage on it while in that condition.

This will be more apparent after a brief consideration of the usual methods of attacking a convoy. The attacking force will have the greatest chance of success when its attack comes as a surprise, and, the more difficult the situation of the convoy when it is surprised, the more complete will be the success of the assailant. The hostile commander will not fail to note these facts when making his plans and laying his ambush, and will endeavor to strike the convoy when it is passing through a wood or other defile, such as a long cut or bridge; if he can at the same time strike it when it is passing an angle or bend in the road, or is on a steep slope, his opportunities are so much the better. If, while the convoy is in this situation, it be checked in front and thrown into confusion, its retreat blocked by a small detachment in rear, and its confusion further increased by a feint at one point while the main assault is made from an unexpected quarter, the destruction should be great.

By taking either of the first two roads mentioned, Captain A would expose the convoy to the possibility of such a calamity. If the enemy may be expected on the westernmost road, he may also be expected on the roads through the woods. His dash against the railway suggests daring and enterprise, and should be sufficient warning to put Captain A on the qui vive. A report that hostile cavalry is anywhere within a radius of twenty miles of a convoy justifies the convoy commander in taking extreme precautionary measures.

After having thus considered the advisability of using either of these roads for the march of the convoy, Captain A examines the third road (i.e., the Atchison pike—Frenchman road) to see if it is a more favorable route. From the moment the convoy mounts the crest of Government hill until it reaches its destination, a part or all of it will be visible to any hostile scouts that may be in observation on the high ground to the west, and the enemy will be able to make his plans for attacking the convoy with full knowledge of its dispositions and movement. But, on the other hand, except in the wooded and rough country south and east of Salt creek, it will be difficult for the enemy to approach within striking distance of the convoy without coming out into the open and disclosing his intentions. Under these conditions it should be impossible to surprise the convoy and there should be ample time to prepare it for defense after the enemy is sighted in force and before he can deliver an attack. This route, however, is not without serious disadvantages. The stretch of road from Government hill to Frenchman is especially dangerous; it may be easily blocked at the latter point by obstructing the bridge over Salt creek, while a very few men

in the vicinity of the railroad cuts at E and on Government hill could cut off escape to the rear. If, while in this condition, the convoy were to be suddenly attacked in flank, disaster would be almost certain. However, to foresee such dangers as these and make wise preparations to avoid them is half the battle. If Captain A's cavalry and other covering detachments appreciate the danger of an attack in this vicinity and perform their duties accordingly, a surprise should not be probable. Between the Salt creek and Plum creek bridges is another dangerous section of the road, especially if the enemy has so obstructed the Millwood road bridge over Salt creek as to prevent the escape of the convoy in that direction.

After having thus carefully weighed the advantages and disadvantages of the three possible routes, Captain A selects the last mentioned—mainly because it passes through country practically free of woods.

Let us now see what disposition Captain A should make of his force. He cannot expect assistance from the Leavenworth garrison in time to help to repel an attack by cavalry. The escort is not large. For the escort of a large convoy, Napoleon allowed two infantrymen for each wagon, one cavalryman for every eight wagons and one gun for every 120 wagons, but for small convoys these proportions are disregarded; in fact, no absolute rule can be laid down governing the size and composition of an escort, for they depend on widely varying circumstances, such as the proximity of the enemy, character of the country, value of the convoy, etc.

If we are to prevent a surprise and avoid an engagement, the enemy must be discovered at a distance; consequently a small reconnoitering force of cavalry is indispensable as a component part of the escort. This is especially necessary when the enemy's

cavalry is to be feared—as is usually the case. In the march under consideration, Captain A should not take the convoy into the dangerous section between Atchison Cross and Frenchman until the cavalry has carefully searched the rough and wooded ground south and east of Salt creek, and assured him that it is clear of the enemy. In preparing an ambushade to surprise a convoy the enemy will often resort to the expedient of remaining at some distance until the escort cavalry has passed—and then swiftly close in on the flank of the unsuspecting convoy. For this reason, the cavalry must so conduct its march as to guard continually the flanks of the convoy and avoid being cut off from the remainder of the escort, while not neglecting to reconnoiter three to five miles to the front and flanks. To do this, the few cavalymen under Captain A's command may become greatly scattered; in general, this is objectionable, but it should be done whenever necessary to insure the safety of the convoy.

The main duty of the cavalry of an escort is to furnish timely information of the enemy, and the amount it can contribute (by fighting) to the security of the column is, ordinarily, a matter of secondary importance. Although such is the general rule, nevertheless, cavalry should not be backward about fighting; on the contrary, the delay occasioned an attacking force by a single squad of cavalry making a stubborn running fight may be the means of saving the convoy.

As a general rule, the more perfectly the terrain favors an ambushade by the enemy, the more thorough should be the search made by the cavalry of the escort. This means that ordinarily the cavalry must do its most careful reconnaissance work where the conditions of woods, gullies, hills, etc., make this most difficult. There is little or no excuse for care-

less reconnaissance by either the cavalry or infantry of the escort, since the marching rate of both is more rapid than that of the convoy; besides, the convoy may be halted whenever necessary to permit of thorough reconnaissance of a dangerous section.

In the present case, the cavalry should be used at the outset about as follows: It should start fully one hour before the remainder of the column, in order that it may have ample time to search carefully the country south and east of Salt creek and send messages back to Atchison Cross by the time the head of the column reaches that point. One sergeant and eight men should be sent to the west of the road, one sergeant and six men to the east of the road, and the remainder of the platoon should push on to Frenchman. The sergeant in command of the patrol sent west of the road should send two men via Dakota street—56—52, with instructions to rejoin at 28; he should send two men to reconnoiter the northern slopes of Government, Southwest and Eleven Hundred Foot hills and then join him at 28; two men should be sent to search the slopes of Hund hill and remain in observation of Salt creek valley; with the two remaining men he should examine the southern slopes of Government and Southwest hills and then proceed to 28 on the Zimmerman road.¹ He would there collect the reports of the other patrols and send information of the result of the reconnaissance to the cavalry commander at Frenchman.² His later

1 Due to the fact that this platoon has been at Leavenworth for some days and is familiar with the country, this sergeant is able to give such detailed and definite instructions to his patrol.

2 In case important information affecting the march of the convoy is obtained by the patrol and delay might result from sending it thru the cavalry commander, the patrol leader should send it direct to the convoy commander as well as to the cavalry.

movements will so conform to those of the convoy as to keep its left flank covered until Kickapoo is reached.

The sergeant in command of the patrol sent east of the road should send two patrols of two men each to search the woods between Hancock avenue and Sheridan's drive as far as Bell point and Fort Leavenworth, and then to assemble at the railroad cut at E; with the remaining two men he should reconnoiter Atchison hill and the slope west of Sheridan's drive as far as Bell point, and then return to E and send back a report. This reconnaissance completed, he should send four men to rejoin the platoon at Frenchman, and with two men should remain near E in observation until the convoy has passed beyond danger; he should then rejoin the head of the column via Sheridan's drive, 15 and 17. The remainder of the platoon should hasten to Frenchman, sending two men around and over Sentinel hill, and four through the woods and along the gullies west of the road. When all have assembled at Frenchman, the lieutenant in command should send back his report. A patrol of one non-commissioned officer and two men should then be sent west on the Atchison pike with orders to rejoin via the road farther to the north, and two men should be directed to proceed to 17 and there await the arrival of the platoon. The entire platoon, with the exception of the patrol last sent to the west, will then move on to 17, where orders can be given for further reconnaissance.

The convoy will be about 800 yards long. By exercising precautions in going up and down the few steep grades on the road, the elongation should be kept at the minimum. To lessen the fatigue due to

1 One of these patrols might well have been directed to continue on via Hancock hill (or 11) and the Millwood road to the vicinity of 17, whence it could communicate with Lieutenant A on the Frenchman—Kickapoo road.

the hurrying of the rear wagons, to preserve their distances and to avoid delays and jamming up at difficult places in the road, the convoy will be divided into two equal sections, each under a wagonmaster. To each of these sections will be assigned a police guard of one squad of infantry under a non-commissioned officer, with instructions to preserve order, protect property, assist the convoy in its march and take part in its defense. The remaining infantry of the escort will be divided into advance guard, main body and rear guard.

The strength of the advance guard of a convoy varies from one-fourth to one-sixth of the entire escort; the rear guard is ordinarily slightly weaker. In this particular instance the convoy is in quite as much danger of attack from the rear as from the front, and both rear and advance guards may well be made the same strength. A section would not be too much for each, but, since it is well to have the main body as strong as practicable, the two squads for police guard may be taken from these two sections, one from each. Both advance and rear guards will have the usual formation for such covering detachments.

The duties of the advance guard of a convoy are in general to reconnoiter the immediate vicinity of the line of march, to make the road passable for the convoy, to drive off small parties of the enemy and delay large ones. It should not pursue the enemy and thus become separated from the convoy.

Captain A will at first have his advance guard only about 600 yards ahead of the convoy. This distance is made small because of the weakness of the advance guard and the desire to shorten the column; when Frenchman is passed and more open country is reached, the advance guard may be pushed farther ahead. It is important that the advance guard be not driven back on the convoy or forced out of posi-

tions from which the enemy might deliver fire on the convoy; but it must hold its ground, if possible, until the convoy has completed its defensive arrangements, and Captain A will caution his advance guard commander accordingly.

The duties of the rear guard are similar to those of the advance guard. It ordinarily follows a short distance in rear of the convoy, but in this instance, since the rear of the column is in quite as much danger as its head, the distance will be about 500 yards.

The remaining platoon of infantry will constitute the main body of the escort; some thought must be given to its distribution in the convoy. It is the main fighting force of the escort and must be prepared to meet the enemy's main attack. If too much scattered along the entire length of the convoy, it will be out of hand and weak everywhere. It will be better to keep the larger part of it united at the most important point. This appears to be the center of the convoy, for from here it can meet an attack against the flank of the convoy and can quickly reinforce the advance or rear guard. It will be necessary, however, to place a squad at the head and another at the tail of the convoy for the immediate protection of the wagons.

Having thus reached a decision as to his intended dispositions, Captain A is ready to assemble his officers and give instructions to prepare for the march. They are informed of the task that has been assigned to the detachment and are directed to assemble for orders at 5:45 a.m., the cavalry is to be ready to move at 6:00 a.m., the infantry and the convoy¹ at 7:00 a.m. Since the situation may be greatly

¹ It is assumed that the wagons of the convoy have been loaded and are parked for the night, under guard of Company A, in the open field south of Prison hill; also that Captain A has arranged with the wagonmasters the details as to the division of the convoy into sections, etc.

cleared up by information received during the night, the orders for the march should not be issued until the following morning.

No additional information of the enemy having been received during the night, the officers and Sergeant D (whom Captain A has told to be present) assemble at the appointed hour. Captain A then gives them the following verbal order:

"The strength and present whereabouts of the hostile cavalry reported in this vicinity yesterday morning are not known.

"Our detachment will escort a convoy of forty wagons from here to Kickapoo today.

"Lieutenant A, you will start with your cavalry at 6:00 a.m. and will cover the movement, reconnoitering well to the front and flanks. You will take special precautions to observe the country to the south and east of Salt creek until the convoy has passed Frenchman, reporting the result of the reconnaissance of this section to me at Atchison Cross. Patrols will be sent well out on the Zimmerman road and the Atchison pike, as well as toward Kickapoo."

"Lieutenant B, you will command the advance guard. It will consist of the 3d Section, less one squad. You will start from the corner of Metropolitan avenue and 12th street at 7 a. m. and march via the Atchison Cross—Frenchman—Kickapoo road.

"Lieutenant C, you will command the main body and will follow the advance guard at about 600 yards. Place one squad of your platoon immediately in front of the convoy and one immediately in rear, and march the remainder of your platoon between the two sections of the convoy. You will have two squads from the 2d Platoon for police guard. Wagonmasters A and B have been designated for the 1st and 2d Sections respectively of the wagon train, and have been

directed to report to you at 6:00 a. m. for further orders.

“Sergeant D, you will command the rear guard. It will consist of the 4th Section, less one squad. You will follow the main body at about 500 yards.

“I will be at the head of the main body.”

After assuring himself that each of his officers thoroughly understands the duties assigned him, Captain A dismisses them and they repair to their respective commands and give the necessary instructions for the march. At the appointed hour the various fractions of the escort and convoy move out.

Situation at 9 a. m.:

At 9 a. m., when the leading wagon of the convoy is on the Frenchman—Kickapoo road in front of the Moss house, the escort commander is handed the following message by a trooper who has ridden up at a gallop:

From Patrol No. 1 On Millwood Road, 3 mi. west
17 Oct. 07. of Breidenbauch,

Convoy Commander, 8:35 A.M. No. 1.
On Frenchman—Kickapoo Road.

Force of hostile cavalry, estimated strength two troops, just seen about 400 yards west of here, trotting east on Millwood road. My patrol has not been discovered. Have notified Lieut. A. Will remain in observation.

A,
Sergt.

While Captain A is reading this message, a second trooper rides up with a message from Lieutenant A, commanding the platoon of Blue cavalry, stating that the main body of the cavalry is at the bridge over Plum creek, awaiting the arrival of the advance

guard, and that no hostile forces have been discovered between Plum creek and Kickapoo.

Captain A directs the two messengers to remain with him. If the enemy has continued his advance at a trot he should be nearing the hill at the Breidenbach house, from which the convoy and the country through which it is passing will be visible, and the Red commander will know from the signs of preparation for the defense of the convoy that his presence is known to the convoy commander. Under these circumstances he will probably cast aside all thought of an ambushade or surprise of the convoy and will attempt to make his attack before the convoy has completed its defensive arrangements. By about 9:15, if not strongly opposed, the enemy can be in position to open fire on the convoy.

The occasion is one demanding quick decision and action on the part of the convoy commander. To push on in an effort to get the convoy across Plum creek would probably be disastrous. The enemy is so close upon the convoy that for the latter to attempt to escape by moving east on the Millwood road, or by turning to the rear, is to risk being attacked while in motion. There seems to be but one thing to do: viz., to park the convoy under cover and so dispose the escort as to hold the enemy at a distance; and Captain A decides to do this.

The head of the convoy has just entered the ravine east of the Moss house, where there is an open field east of the road, with a barbed wire fence on its southern side and a hedge on the side bordering the road. Here the convoy may be so parked as to be safe from a cavalry charge and under cover from fire so long as the enemy is kept off the adjacent hills. The most dangerous of these is hill 900, about 350

yards northwest of the Moss house, and it will probably be the enemy's objective as soon as he has located the position of the parked convoy. This hill commands all approaches from the north, south and west. It should be seized immediately and so occupied as to ensure its being held. The Moss—Taylor spur and the spur at the Taylor schoolhouse should also be occupied, but, since the fire from the top of hill 900 can sweep the ravines in front of both these spurs, they need be occupied but lightly at the outset; a squad to each from the rear and advance guards respectively should be ample. The remainder of the infantry of the escort should be assembled about 300 yards south of the cross-roads where it will be near the flank which is in greatest danger.

Having reached his decision, Captain A proceeds to issue the order for his dispositions. He turns to Lieutenant C, who is in command of the platoon forming the main body of the escort, and gives him the following verbal orders:

"Two troops of hostile cavalry were seen about four miles west of here at 8:35 a. m. trotting east on the Millwood road—the road about 800 yards north of here. They should be near here by this time.

"The convoy will immediately be parked just east of this road and the detachment will occupy the surrounding hills to defend it.

"Occupy yonder hill (indicating hill 900) with your platoon, holding the larger part of it in reserve at the start.

"The advance and rear guards will be assembled as a reserve on the road just north of the park, leaving one squad on this ridge (indicating the Moss—Taylor ridge) and another at the cross-roads north of here.

"The cavalry will cover the right flank.

"I shall be with the reserve."

The wagonmaster of the leading section of the convoy is then instructed to park his wagons, and the non-commissioned officer in charge of the police guard with his section is directed to see that this is done promptly and in an orderly manner. The wagonmaster and police guard of the second section are given similar orders when they reach the park.

Captain A then sends the following written order to the commander of the advance guard, using one of the detained troopers to carry it; "Two troops of hostile cavalry are approaching on the Millwood road from the west. Leave one squad at Taylor school-house in observation and report here with the remainder of the advance guard." This trooper is then to proceed toward Kickapoo until he meets Lieutenant A, to whom he will give the following verbal message: "Captain A directs that you report to him at once with your cavalry."¹

To the commander of the rear guard he then sends the following order by the remaining trooper: "Hasten the march of the rear guard to this point, leaving one squad on the ridge just south of where the convoy is being parked."

Captain A now has an opportunity to turn his attention to the parking of the convoy and its defensive arrangements, and to deliberate for a few moments on the dispositions he will make of the cavalry. He has already sent it orders to withdraw from its advanced position at Plum creek bridge, that position being too exposed for so small a force; besides, its assistance may be needed in the defense of the convoy. So small a force as Captain A's should not attempt to fight two engagements at once. His first task is to drive off the enemy; Plum creek may be

¹ It is quite likely that Lieutenant A, upon receiving Sergeant A's message, decided to withdraw nearer to his infantry support and is now returning to the vicinity of the convoy.

crossed later. The cavalry will best be employed as a small mounted reserve at the position of the convoy, with a patrol watching the right flank.

It may be objected that hill 900 is occupied by too large a force, thus unduly weakening the reserve, but it is believed that Captain A's dispositions are wise. This hill is the key to the position. If the enemy discover that fact and make a sudden dash for its possession, there will be no time for Captain A to send reinforcements from a distance. However, he instructs the officer, sent to defend this hill, to hold the larger part of his platoon in reserve; if the main attack should develop at some other point, this reserve may be employed in meeting it.

ATTACK OF A CONVOY*

Situation:

On the evening of September 20, 1907, a Red force based on Atchison, Kansas, reached Boling (7 miles southwest of Leavenworth) in pursuit of an inferior Blue force which is retiring on Topeka (45 miles southwest of Leavenworth).

A Blue squadron of cavalry camped the same night at Farley, Mo. (5 miles southeast of Leavenworth). One troop of this squadron, under Captain A, was sent early this morning (September 21st) via the Terminal bridge to Leavenworth on reconnaissance. At 8 a. m. the troop reaches the corner of Metropolitan avenue and Broadway where Captain A receives reliable information that 20 4-horse wagons, accompanied by about 60 Red infantry, will leave Fort Leavenworth via Prison lane for Boling at 9 a. m. No other Red troops are in the vicinity. The country is friendly to the Blues.

The information of the enemy is so definite in details that it appears to be based on the personal knowledge of the informant and is therefore accepted as substantially correct.

The Red force at Boling is too far away (7 miles) to support the convoy. A 4-horse wagon occupies about 14 yards of road space but, on account of the steep slopes on Prison lane, the elongation of the train will probably be great. Captain A estimates

* Map of Fort Leavenworth, Kansas, and Vicinity, 4 in.=1 mile.

that the wagons will occupy about 20 yards each and that the entire length of the train will be about 400 yards.

It seems probable that the wagons will be conducted as a single train with a part of the escort in front and another in rear. The convoy will be preceded by an advance guard whose leading element will probably be about 600 yards in front of the train; the train doubtless will also be followed by a rear guard. Thus the entire convoy will probably be strung out over a distance of more than 1000 yards. The escort will doubtless send out lateral patrols. As the country is open on both sides of Prison lane, these patrols will probably move substantially parallel to the road. As the convoy commander may have learned of the appearance of the Blue squadron at Farley, the flanking patrols to the east of his line of march may be stronger and more vigilant than those on the west.

A few men will undoubtedly be scattered along the train for the purpose of preserving order and keeping the train closed up.

Since the convoy is not expected to start until 9 a. m., Captain A has an abundance of time in which to make his dispositions for attack.

Captain A's force numbers 100 men, but, if he dismounts it to fight on foot, leaving the usual number of horseholders, he can bring only 75 rifles into action. This gives him only a slight numerical superiority over the enemy—not enough to enable him to gain decisive results unless he takes advantage of the enemy's dispersion and makes use of favoring features of the ground. Surprise will also be essential to success; consequently Captain A, while making his preliminary dispositions, must take care to keep his command under cover, and when the time comes to act, he must act quickly.

Although the escort of the convoy will doubtless be split up into detachments scattered for a thousand yards or more along its line of march and can not quickly concentrate to meet a determined attack at any one point, nevertheless, the great range of modern fire arms will minimize this disadvantage, and the greater part of the escort may be able to concentrate its fire against such an attack.

If Captain A engages in a protracted fire fight with the enemy, the latter will have time to concentrate against him and in that case the most Captain A could accomplish would be to kill the teams and inflict losses on the escort. The teams, however, are valuable; moreover, they are necessary to Captain A if he is to capture and get away with any of the wagons.

From the high ground north of Metropolitan avenue, Captain A sees that there are two prominent ridges south of Fort Leavenworth and north of Leavenworth, viz: the National Cemetery—Merritt hill—Rabbit point ridge and the U. S. Penitentiary—waterworks ridge; that between these ridges the ground is open and rolling and affords good positions for resisting the advance of troops moving south from Fort Leavenworth. To the east of Prison lane, Corral creek and its branches have steep banks and are formidable obstacles to mounted action or to the movement of wagons off the roads. These ravines, however, afford cover for dismounted troops.

West of Prison lane the ground is more nearly level and is favorable for mounted or dismounted action. West of Prison lane also, the train may, if attacked from the east, readily reach Hancock avenue and thence proceed to its destination via 20th street or Salt creek valley. Still farther west, Captain A sees a wooded height and the target butts, which

afford an excellent covered line of advance against the right flank and rear of the convoy.

Two prominent hills, Long ridge and Merritt hill, are good posts of observation for hostile scouts and may be occupied by them. Captain A, however, can observe the enemy's movements without sending forward patrols and will thereby minimize the probability of the enemy's learning of his presence.

Prison lane has, between the National Cemetery and the U. S. Penitentiary, several steep slopes which would retard the movements of a train and increase its elongation. Between these points the lane crosses three bridges which would limit and restrict the movements of the wagons. Hancock avenue might, be used by the convoy in case the presence of the Blue troop is discovered. Grant avenue is not likely to be used by it except for patrolling.

The roads available for Captain A's use are Metropolitan avenue, Grant avenue, Prison lane and Hancock avenue, but the country is open and may be traversed anywhere by cavalry, except that some of the ravines might necessitate detours. A movement on Prison lane or east of it would probably be seen by the enemy's scouts, but troops on Metropolitan or Hancock avenues could not be seen from the vicinity of Fort Leavenworth.

Captain A's decision is to attack the convoy and attempt to capture the train. His plan is to engage the advance guard with a part of his troop, using dismounted fire action, and compel the train to halt and the greater part of the escort to deploy to the front in order to clear the way. He then, with the greater part of his troop, will make a mounted charge against the rear of the train, which probably will not be strongly defended.

A suitable place for checking the enemy's advance guard is found on the ridge running north

from the U. S. Penitentiary; this ridge can be approached under cover from the south and west sides of the Penitentiary. The position selected is about 300 yards north of the northwest corner of the Penitentiary. From here fire will be opened on the advance guard as it ascends from the bed of Corral creek. It will be sufficient for the purpose to leave only a platoon here, but its dismounted strength may be increased by detailing only one or two men as horseholders. This can be done in this case because no mounted troops are opposed to Captain A, the led horses are in no danger of being captured, and there is no special reason why the platoon should possess mobility.

As this platoon will probably not be used mounted in the attack and as the horses are in no danger of being captured, the led horses may be left at a considerable distance to the rear. Since it is proposed to leave only one or two men with them, the horses should not be placed where there is any likelihood of their being brought under fire. The depression about 100 yards west of the northwest corner of the Penitentiary is thought to be a suitable place for them, altho this is a matter of detail which would ordinarily be left to the platoon commander.

Captain A will conduct the remainder of the troop under cover to a concealed position in the woods north of the target butts. Woods at this distance from the enemy's line of march can be thoroly reconnoitered only by mounted scouts and these the enemy is not believed to possess. Captain A will wait here until the flanking patrols of the escort have passed him and will then move eastward to the edge of the woods east of the target butts and watch for a favorable time to attack.

It is expected that the greater part of the escort will be brought into action against Captain A's dis-

mounted platoon; at that time the train will probably be astride the north branch of Corral creek. When some such favorable situation arises, Captain A will attack. The attack will be made by platoons charging as foragers. Two platoons may be sent against the rear guard or other Red force at the rear of the train and the other platoon at first held in reserve and later used in securing the wagons. The ground here is practicable for small bodies to charge over, while Long ridge screens the charge from the view and fire of the portion of the escort which has passed beyond its crest. The wagons cannot escape to the east, as their progress in that direction will be obstructed by ravines. As many wagons as possible will be captured, turned about and moved north at a trot on Prison lane and thence, via the Fort Leavenworth bridge, to the camp of the squadron on the eastern side of the Missouri river.

ARTILLERY WITH SMALL COMMANDS*

Situation:

On June 1, 1908, a Blue force at Platte City, Missouri, sends a detachment (consisting of the 1st Infantry, Troops A and B, 1st Cavalry, and Battery B, 1st Field Artillery, under command of Colonel B) to reconnoiter in the direction of Easton, Kansas, where a Red detachment is reported.

About 9 a. m. the main body of the Blue detachment begins crossing the Missouri river bridge at Fort Leavenworth. When the battery commander, Captain A, at the head of his battery, reaches the western bank, his battery agent of communication,¹ who has been with the detachment commander at the head of the support of the advance guard, meets him and informs him that Colonel B wishes to see him at once. Turning over the battery to his senior lieutenant, Captain A rides rapidly forward, accompanied by the chief of his 5th Section,² one trumpeter and two orderlies. The chief of section carries the battery telescope, and the trumpeter the tripod.

Guided by the agent, Captain A joins Colonel B at Merritt hill. Colonel B informs him that, according to reports from the advance cavalry, a Red force is on the hill just west of the intersection of Shawnee and Twentieth streets, and that it will probably be necessary to attack.

The battery scouts³ are with the advance cav-

* Map of Fort Leavenworth, Kansas, and Vicinity, 4 in.=1 mile.

1 D. R. F. A. ¶¶501-506.

2 D. R., F. A., ¶255.

3 D. R. F. A. ¶498.

alry. The bridge on Farragut avenue over One Mile creek¹ has been destroyed.²

Captain A examines the ground in the vicinity for a battery position in the event of an engagement. The ridge on which he is standing (Merritt hill—National Cemetery) is in itself a good position, and can be reached under cover; but the range is so long, nearly 4500 yards, that he looks for a more advanced position.

Long ridge is next noticed, and the range from its crest estimated at 3500 yards. It is impossible to find a completely covered way to it, but the exposure would be for a short distance only, and the battery might possibly not be perceived. If it should be seen by the enemy, and the latter has any artillery, he might search the ground behind the ridge; but the space is so great that he could not guess within half a mile the exact location of the battery until it had opened fire.

The hills near the U.S. Penitentiary appear to offer several good positions, and it should be possible to get within 3000 yards range somewhere in that vicinity. The penitentiary buildings themselves increase the facility of finding suitable cover; on the other hand they might interfere with observation of fire. It appears possible to gain the cover of these hills by way of the bridge (XVIII) over Corral creek, seventy-five yards west of the electric railway trestle. A few hundred yards of the way between Merritt hill and this bridge are evidently in plain sight of the enemy; but this exposed portion could be crossed

1 One Mile creek is unfordable.

2 In this study, the tactical employment of the artillery only will be discussed, the operations of the other arms being outlined only so far as is necessary to enable the general situation to be understood.

rapidly, and the chances would be small that the enemy could do any damage during the brief moments of exposure. After the cover of the hills south of Corral creek is once gained, there are so many places where the battery might go that the enemy could not make even a reasonable guess as to its position until it had opened fire.

Technical considerations incline Captain A to the short range position. The effect of shrapnel continues at or near its maximum up to 3000 yards or so; but beyond this range it begins to decrease considerably, chiefly because of the increasing angle of fall, which reduces the space swept by the bullets of each shrapnel. Errors of the fuze also become more serious as the range increases. Thus, while work may be done if necessary at extreme ranges, it is much more satisfactory, and much more economical in ammunition, to come to 3000 yards or thereabouts if conditions permit. On the other hand, too short a range is undesirable, as the trajectory is then so flat that reverse slopes are not effectively searched. It might be said, roughly, that a range somewhere between 2000 and 3500 yards is most desirable.

In the present case, the position near the Penitentiary may be reached with very little more difficulty and exposure than the one at Long ridge; and there is no special reason for haste in opening fire, as it must necessarily be some time before the infantry can get into position to attack.

While Captain A is engaged in these observations, further reports of the enemy are received by the detachment commander, who decides to attack. Captain A recommends to him the penitentiary position for his artillery.

At 9:40 a.m., Colonel B assembles the officers of the main body (which is nearby on Grant avenue) at Merritt hill, and issues the following verbal orders:

"A hostile force, reported to consist of one battalion of infantry, one troop of cavalry and one battery of field artillery, occupies that hill" (pointing to the one just west of Shawnee and Twentieth streets).

"Our detachment will attack the enemy, enveloping his left flank.

"Captain A, you will place your battery in a covered position near the United States Penitentiary" (pointing), "search for and fire upon the enemy's artillery, and later support the infantry attack. Your movement into position will be covered by infantry from the advance guard."

"Major C, you will * * * * *

* * * * *

"Major D, you will * * * * *

* * * * *

"The baggage train will * * * * *

* * * * *

"I shall be * * * * *

Colonel B also sends a message to the cavalry commander and another to the commander of the advance guard (which has been halted on Grant avenue near the masonry bridge over Corral creek), informing them of the situation and of his plan of attack, and giving them the necessary orders. In the message to the advance guard commander, Colonel B includes information as to the contemplated use of the battery, and instructions for the advance guard to cover its movement.

Upon receiving his orders, Captain A sends the following message by one of his orderlies to the battery:

Merritt hill,

1 June 08 9-40 A. M. No. 1.

Lieut. E,

Form and prepare for action,¹ and move forward

1. D. R. F. A. ¶ 447.

by route indicated by bearer. Train² will remain between INFANTRY BARRACKS and MERRITT lake. Reserve¹ will halt just before reaching crest of MERRITT hill, with orders to keep touch with battery and follow it when it opens fire. Further orders for position of reserve will be given at CORRAL creek when it reaches there.

A,
Capt.

The battery commander, with the chief of section, trumpeter and remaining orderly, hastens to the bridge (XVIII) over Corral creek near the electric railway trestle, noting as he goes that the ground is suitable for rapid movement and that the Union Pacific railway can be crossed without difficulty. Passing over the bridge, he advances far enough to get a view up the ravine which leads from the trestle toward the Penitentiary, and sees that the battery can ascend the left bank of this ravine without exposing itself, and reach a position on the slope east of the Penitentiary. He also notes that the infantry of the advance guard is moving forward, and by the time the battery comes up, will be in position to cover its movement. He sends back his remaining orderly to meet the battery, show it the best place for crossing the railway, and guide it to this avenue of approach to the position. He himself, with the other two men, moves direct to the position, selecting a point near the head of the ravine where the battery can easily cross.

The positions of the flank guns are marked by stakes, on the sloping ground between the two branches of the head of the ravine, at about contour 875. The telescope is set up far enough in front of the line to get a good view, and a little to the left of

1. D. R. F. A. ¶ 367.

the line of fire of the left gun. The tower of the Staff College at Fort Leavenworth is selected as an aiming point¹ and the battery commander begins to prepare his firing data;² as the enemy is not visible, he takes a prominent tree near the quarry as a ranging target, knowing that he can easily switch his fire to any point in that vicinity when he so desires.

Meanwhile the battery is coming up. Following the directions of the battery commander, the orderly first sent back by Captain A leads it off Grant avenue at the south side of Merritt lake, follows the shore of the lake and its southern branch until nearly north of the saddle west of Merritt hill, and then directs the battery toward the saddle. As ordered, the reserve halts just before reaching that point.

The lieutenant in command keeps the battery at a trot until the saddle is approached. He has learned from the orderly where the enemy is, and keeps 50 or 100 yards ahead of the battery, watching to see that his advance is covered. Noting that a mounted man at this point is visible from the enemy's position, while a dismounted man is not, he slows to a walk, and dismounts drivers and cannoneers while crossing, mounting them again on the other side.

Still guided by the orderly, he starts south down the left bank of the ravine, taking up the trot again. He soon comes to a point where he can no longer keep out of sight, and increases the pace as much as possible. Shelter is again found after going thus for a few hundred yards, but the trot is kept up wherever the ground permits.

The other orderly is met near the railway, and he takes over the duty of guiding the battery, as above indicated. The battery approaches the line marked for it (the position of the stakes being indi-

1. D. R. F. A. ¶ 231.

2. D. R. F. A. ¶ 261.

cated by the trumpeter), turns to the left so as to move along the line, forms double section column¹, and unlimbers to the right². The rear gun in the column thus becomes the right or directing gun³.

The limbers turn to the left about, clear the battery, and then move up to the Penitentiary, under cover of its high walls. They take post close to the wall, at the eastern end of its northern face. There is no particular reason why the enemy should fire upon the Penitentiary with shell; and even if he should, the limited number of light shell carried by an ordinary field battery would hardly be sufficient to endanger the limbers. In the unlikely event of danger from this source, they could move northward down the left bank of the ravine running north from 72, as far as necessary to secure protection.

When the battery opens fire, the reserve, as ordered, comes up as far as the Corral creek bridge. Orders are sent it to cross the bridge and remain near it under cover. The enemy at this time will be occupied in searching for the firing battery, and probably will not even notice the reserve as it crosses the exposed space, much less fire upon it.

The enemy will naturally be expecting fire from somewhere in the general neighborhood of the Penitentiary, for he will have seen the battery headed in that direction. But this will profit him little under the present conditions. The sheltered area into which he has seen the battery disappear is very large, and no clue exists as to the intentions of the battery commander. Both sides will have to watch for flashes, shot furrows in the ground, etc., and locate the target as best they can; but the Blue battery commander should have an advantage, in that the

1 D. R. F. A. ¶¶ 210 & 375.

2 D. R. F. A. ¶¶ 221 & 480.

3 D. R. F. A. ¶¶ 257 — 260.

enemy's position is of less extent than his own, so that the limits of his search are narrower.

Another advantage he should now derive from the observations of his scouts. Since the advance cavalry has succeeded in getting good information of the enemy's general position, Captain A may reasonably hope that his own scouts, who have been with the cavalry, have found out something about the enemy's guns. If this is the case, one of the scouts may be expected to join the battery at any moment, with information which will greatly facilitate the battery commander's task.

Such a use as this of the artillery scouts is not at all infrequent. In this case, the reconnaissance officer of the battery ¹ did not accompany the scouts; often he would so, and take charge of their work.

Probably the firing data would be complete by the time the battery reaches the position, and firing could begin at once. The subsequent course of action on the part of the battery would depend so much upon circumstances that it can be indicated only in a general way.

The artillery forces being equal, the prospect of silencing the enemy's battery would be only fair; still there is a chance. In any case, it can be kept so well occupied that it can devote but little attention to the Blue infantry.

If the enemy's guns can be partially silenced, the battery will turn its attention to the Red infantry. Sooner or later, as the attacking infantry advances, the defenders must show themselves more or less, and the battery must keep down the fire of the latter. The orders given the battery commander leave him a free hand to manage his fire according to his own judgment.

The principle by which he will be guided is: "As

1. D.R.F.A. ¶255.

a general rule, the fire of artillery is directed against that arm of the enemy which at the time is predominant, or which is capable of inflicting the greatest loss on the infantry or cavalry that the artillery is supporting." Applying this principle to the present case, it will at first be necessary to fire upon the enemy's artillery; later on, it will become more and more desirable and necessary to turn upon his infantry.

Being alone, the battery will then be forced to do two things at once—keep down artillery fire in one place and infantry fire in another. This it might do by assigning a platoon to each target; a better plan, however, would be to keep all the fire in the hands of the battery commander. His means for controlling it are better than those at the disposal of a platoon commander, and the concentrated fire of the battery is much more effective than the dispersed fire of the two platoons.

The battery commander can switch his fire upon the enemy's infantry, whose position is probably not far enough removed from that of the Red artillery to render this especially difficult. Then, having the firing data for both targets, he may distribute his volleys upon them as he thinks fit.

If the Blue artillery were superior in force to that of the enemy, a change of position for a part of it might perhaps be desirable at this stage. Enough would be left to keep down the hostile battery, and the rest moved forward, perhaps to Avenue hill, where the range would be very short and observation better.

Having only the one battery, however, the change would be made only if the position of the enemy's infantry were such that fire upon it could not be observed. It is of importance that the fire of the hostile artillery be kept down, and a change of

position now would make it necessary to range again on the Red battery. One platoon cannot well be sent, for then one platoon or the other, on account of lack of instruments, would be at a disadvantage in using indirect fire; and the chances would be against its accomplishing much by direct fire, since the Red battery in all probability would not have been seriously damaged before that time, and from its covered position would turn its attention to the one exposed platoon. The situation would be reduced to this: equal forces, but one battery concentrated and concealed, the other dispersed and partially exposed. There could be but one result.

If a change of position is found to be necessary, it must be made with the utmost rapidity. The battery commander or his reconnaissance officer should go forward, select a new position and begin to prepare firing data, the battery meanwhile continuing in action; then at a favorable moment, the battery would quickly change position and resume firing.

It will be noted that the occupation of the first position is of the simplest nature; that is, the battery is so placed that it can limber quickly and easily and can move out without embarrassment, and the battery commander is so close to his guns that no telephone lines are necessary. Furthermore, the position selected is such that, if desired, the guns may be quickly run up to the crest for direct fire. All these things are very desirable when a battery is operating alone: this is the time, of all times, when it is important for it to retain its mobility to the greatest extent.

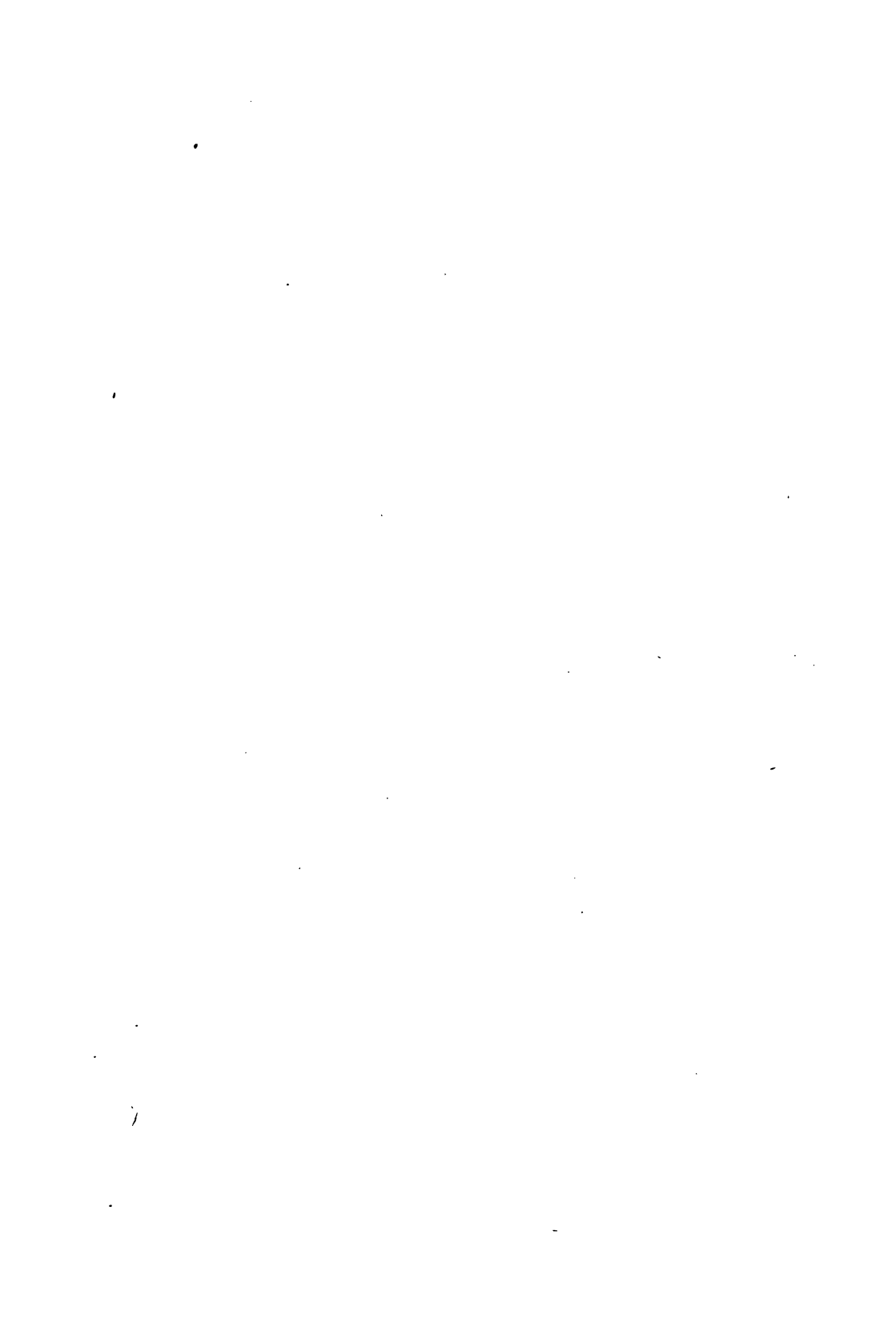
In this case, there appears to be a considerable preponderance in infantry on the Blue side, and the attack will probably succeed. The main attack will come up from the left of the Blue battery. The latter will then, when the attacking infantry ap-

proaches the area covered by its fire, sweep the line of Shawnee street west of the quarry. Thus if the enemy attempts to withdraw or to reinforce his line by way of the south, the Blue infantry will be in position to take the movement in flank; if by way of the west, the artillery fire will cause loss and confusion in that quarter.

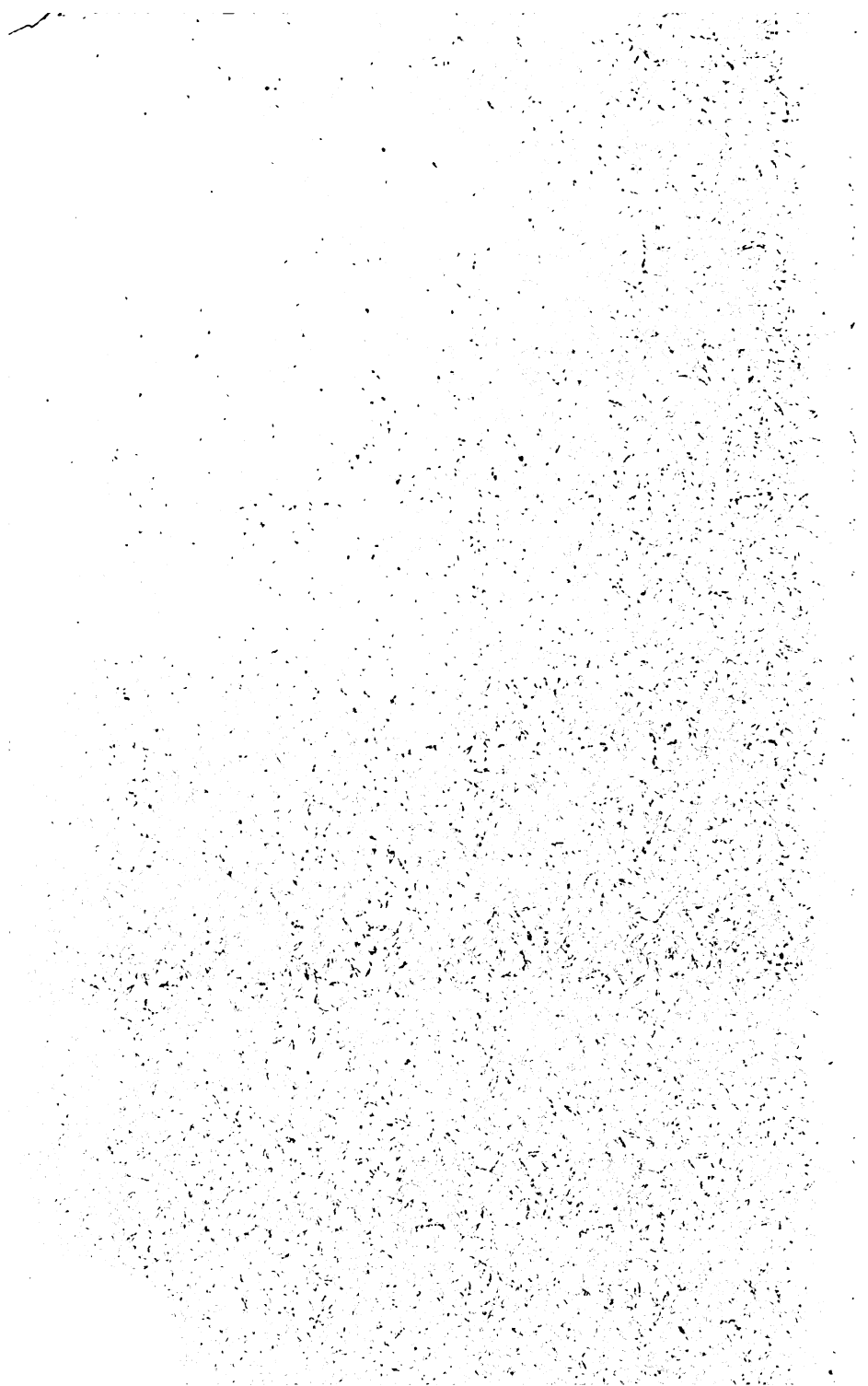
As soon as it appears that the attack has been successful, the detachment commander will doubtless send for the battery to assist in holding the captured position. Should no orders come, the battery commander should move up on his own responsibility. If the enemy withdraws before the final assault, the battery should move up in like manner, come into action supported by the most advanced cavalry or infantry, according to circumstances, and fire on the retreating column. In either case, the advance should be made with the utmost celerity.

In the event of reinforcements reaching the enemy and the attack being repulsed, it will become the duty of the artillery to cover the retreat across the Missouri. It should, as a first move, withdraw to the Merritt hill ridge, fire upon the most advanced closed bodies of pursuing troops, and particularly attempt to prevent hostile artillery from reaching a point from which it could command the Fort Leavenworth bridge.

Throughout the action outlined above, shrapnel only would be used. Against the infantry, of course, shell would not be considered, as any intrenchments would be hasty and light; and against the artillery, no effect upon materiel would be looked for under these circumstances, the effort being merely to make the personnel keep under cover.







Stanford University Libraries



3 6105 127 308 729

